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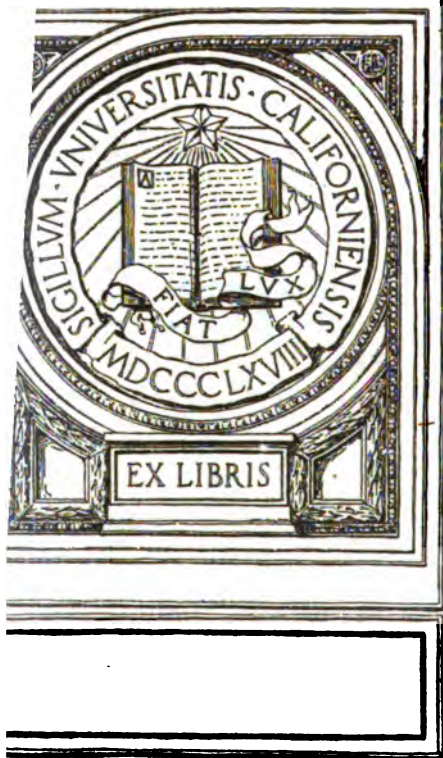
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# INDUSTRIAL TRAINING

N. B. DEARLE

EXCHANGE











# **STUDIES IN ECONOMICS AND POLITICAL SCIENCE**

Edited by the Hon. W. PEMBER REEVES,

*Director of the London School of Economics and Political Science.*

No. 39 in the Series of Monographs by Writers connected  
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## **INDUSTRIAL TRAINING**

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# INDUSTRIAL TRAINING,

WITH SPECIAL REFERENCE TO THE  
CONDITIONS PREVAILING IN LONDON

BY

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Research Student of the London School  
of Economics and Political Science,  
1907-9.

LONDON

P. S. KING & SON  
ORCHARD HOUSE  
WESTMINSTER

1914

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EXCHANGE  
AUG 4 1915

W. W. W. W. W.  
A. W. W. W. W.

## PREFACE

THIS book has gradually grown to its present scope out of an enquiry into which I originally entered as Shaw Student of the London School of Economics. A previous investigation into the problems of unemployment in the London Building Trades had impressed upon me the great importance of the question of training, and led me to start to examine it in relation to this industry. It soon became obvious, however, that the investigation required to cover a far wider field, and, as its subject-matter broadened, its title—mercifully—narrowed, till what began as *Modern Methods of Industrial Training in the London Building Trades* took final shape as *Industrial Training*.

I have attempted to describe in my opening chapter the actual methods of enquiry which I adopted ; but there is one point that requires to be emphasized here. This is that the book is mainly a description of the methods and conditions prevailing in London. I have tried, indeed, to compare and contrast them with those of other cities ; but in the main it is an investigation of London, or rather of what is known nowadays as Greater London.

This includes not only the County Area, but those surrounding districts which really combine with it to form a single whole. Its total population is just over 7,250,000, or rather more than one-fifth of the whole population of England and Wales.

In applying to other places, however, the results of an enquiry into London conditions, there are two questions which have to be answered. First, are the trades of London sufficiently varied and representative for the purpose? Here, with certain reservations, an affirmative reply can be given. It is true that a few large industries, notably coal-mining, the conversion of metals and the textiles are almost non-existent; but apart from them, London practises a very large number of trades, and, even in proportion to its size, has a greater variety of employments than almost any other English city with the possible exception of Birmingham. On this point, therefore, a satisfactory answer is possible.

Secondly, do the methods of London fairly represent those which generally prevail? To a great extent, as I have found it necessary to emphasize more than once, the special acuteness of London problems is not due so much to causes that are in operation there and nowhere else as to the fact that they are found in it in a more extreme form and to a more marked degree. Thus what has been said of the decline of Formal Apprenticeship in the Capital, by no means holds good of other places. The mix-

ture of methods, again, is in few other towns so extreme as it is in London. Still it is equally true that similar tendencies are in existence almost everywhere, though they have not been carried so far. London, therefore, appears to exhibit not the average, but the extreme, form of modern conditions, and this, in addition to its size and the variety of its industries, gives its methods of Industrial Training their very great importance. Modern problems have been developed most fully there, and their complications are the greatest. Consequently the difficulties of other places are the same, only less formidable, the remedies similar, but more simple.

In conclusion, I wish to thank most heartily all those whose generous help and assistance has been most ungrudgingly given to me. To specify them individually would be impossible, for their name veritably would be legion ; but there are a few to whom I wish to accord individual mention. First of all, I would express very sincere gratitude to Professor Lees-Smith, M.P., under whom I have worked at the London School of Economics in the preparation and writing of this book, and to whose guidance and supervision I owe much ; and to Mr. L. L. Price, Treasurer of Oriel College, Oxford, who has helped me in ways too numerous to mention, and not least as a ready listener to many, and, I fear, long-winded discourses. I have also to thank most cordially those who have read and criticized in manuscript various parts of the proofs : Dr. Lilian Knowles,

Reader in Economic History in the University of London, who has in many other ways also given most kind help and interest ; Mr. Cyril Jackson, L.C.C. ; Mr. W. H. Beveridge, Director of Labour Exchanges and Unemployment Insurance ; and Mr. R. H. Tawney. Nor must I omit to mention and acknowledge the help of others, of Mr. B. M. Headicar, Librarian of the London School of Economics, for much assistance in getting the book through the press ; of Mr. Kenneth Cotton, who prepared the index ; and of Miss Marion Meadowcroft, who converted a particularly vile and involved manuscript into some of the clearest typing it has been my pleasure to use. To them and to all the others, who have so fully and freely helped me, I desire to express, however faultily, the gratitude that I feel, and to express also the hope that the results may be not altogether unworthy of their kindness.

Finally, great as is my debt to them, I feel it is equalled and even surpassed by that which I owe to the London School of Economics and to All Souls College, Oxford. From the former I received the gift of a Shaw Research Studentship, founded by Mrs. Bernard Shaw, to whom also I wish to acknowledge my debt, for the purpose of encouraging enquiries such as I have tried to make this. I can safely say that this book could not have come into existence at all but for the School, and it now honours me by including it in its series of studies in Economics and Political Science. To it I am indebted for a

great deal in this connection and for still more in other ways.

To All Souls I owe more than I think I shall ever be able to express, and more certainly than I can venture to try to express here. It is only of the present book, therefore, that I wish to speak now. For certainly, were it not for the Fellowship in Economics, to which I was elected in 1909, it could never have reached the dimensions it has done. It is through the College, therefore, that I was able to obtain the time and the leisure to treat the matter even as fully as I have done.

It only remains for me to leave this book, now that it at last sees the light, to the kindness of its readers. Its appearance is only after too many delays, and I can but acknowledge the patience and forbearance of those concerned. I can only hope that it may prove to have justified them.

NORMAN DEARLE.

THE LONDON SCHOOL OF ECONOMICS,  
*June, 1914.*



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## CHAPTER I.

### THE PROBLEM STATED.

#### (I) SCOPE OF THE PROBLEM.

#### (II) TRADES AND INDUSTRIES OF LONDON.

- I. *Scope of the Problem.*—Scope of the Problem of Industrial Training—Its Meaning—Occupations covered by the Term Industrial—Relation of the Problem to the Apprenticeship Question—Difficulty of using the phrase Industrial Training—Problem a Threefold One—First Main Question: How Boys learn trades—Second Main Question: How Boys are taught trades—Third Main Question: How Boys do not learn trades—Method of Treatment to be followed in the rest of the book—Method of Enquiry and Assistance received.
- II. *Trades and Industries of London.*—Numbers engaged in the Chief Industries of London—Difficulties of Making an Accurate Estimate—How Overcome?—Size of the Chief Industrial Groups: in London, in Greater London, in the Rest of England and Wales—Industries which do not exist in London—Industries which are unusually large there—Commercial and Distributive Work—The Different Kinds of Employment and the Numbers engaged in them—General Features of London Industry Summarized.

#### I. SCOPE OF THE PROBLEM.

THE subject of Industrial Training is one which can be given either a wide or a narrow scope, and therefore it is necessary to begin by defining clearly the ground which our treatment of it will cover. For it is one that borders upon, and frequently overlaps, a variety of others. Training for a trade involves considerations of the methods by which it is recruited. Still more does it necessitate enquiry into the instruction given in Trade or Technical Schools, since this at present plays an important part in it. Above all,

it is so inextricably interwoven with the question of Boy Labour, that the two problems have to be considered together. For those who deal with Industrial Training are not unconcerned with its failures and their causes, whether these occur because the attempt to acquire a trade is unsuccessful or because it is never made at all. The matter, therefore, cannot be limited to its narrowest sense or regarded simply as a question of how various occupations are actually taught to the boys who enter them ; for an adequate treatment of it requires that full account shall be taken of its various antecedents and accompaniments.

In the first place, therefore, the meaning of the term industrial requires definition. Roughly speaking, it covers the manual workers generally, and so coincides fairly closely with the distinction between Industry and Commerce in the wider sense. For most purposes, therefore, we shall exclude from the enquiry men and boys engaged in professional and commercial employments, and in the literary and artistic professions, in the services—naval, military and police—and in the mercantile marine. Nor will it deal directly with the actual training of those who are described in the census as dealers, shop-keepers, shop-assistants and the like.

These latter have, nevertheless, an important influence upon the general problem in so far as they employ as boys those whom they cannot absorb as men, or so far as they find openings in adult processes for those who have been otherwise engaged during boyhood. This is also true of the lower ranks of commercial occupations, and notably of office and messenger boys. Another interesting case arises where, as with bakers, one class of workmen is engaged in wholesale manufacture and another in retail distribution. As a whole, however, this book deals primarily with what may be called the manual workers engaged in industry, but to the term industry, a wide meaning is given.

Secondly, within the trades concerned, the artisan and semi-skilled workers must be distinguished, both from those who fill the higher posts, and from the so-called unskilled

workers. With the former this book is not directly concerned and will not, therefore, cover the training of the employers themselves, their salaried staff and the various technical experts engaged in the work, or that of foremen<sup>1</sup> and clerks of the works. To this, however, there are certain exceptions. There is the question whether the training given to our artisans in the workshop or Trade School will enable them to rise to fill, and to fill efficiently, such higher posts, and how far existing methods provide a sufficiency of men for the latter.

Again, unskilled labour will receive a less full treatment, since what it requires is not so much training as the development of good industrial habits, steadiness, regularity and the like. Much work, however, is loosely referred to as such, which on examination has to be ranked as semi-skilled; and in relation to certain sides of the problem the question of the recruiting of this type of worker is of great importance. When we deal, moreover, with the reasons for the presence of unskilled labour and for its presence in such large and often excessive quantities, we reach one of the most vital problems of all—namely the causes, extent and results of the failure of our existing methods. Above all, holding, as one must, the view that such labour is, and is likely to remain, an essential part of our industrial system, it is necessary to enquire carefully how such positions are filled and by whom, how they actually are fitted to fill them, and how they can best be so fitted.

Now, in dealing with the matter on these lines, one is struck by the very significant extent to which the term apprentice actually survives to-day; and this suggests that the frequent and confident assertion that "Apprenticeship is dead" may be the result of a too hasty diagnosis. This matter will be treated more fully later, but at the present day the term is often used to denote practically all

<sup>1</sup> It is necessary to distinguish between the general or "walking" foreman and the foreman at the head of a department in a large firm, and the "working" foreman in a small shop who overlooks the men and works at the bench at the same time.

boys who are learning a trade, whether they are working under an Indenture or not. The problem is thus really that of Apprenticeship considered in a wider sense, and, when so defined, covers the extent of its survival and the alternative devices by which it has been replaced. Hence it is a sufficient illustration of the extension of the enquiry to say that it is coincident with what is usually known as the Apprenticeship Question.

In one respect the title of this book is an unfortunate one. The word "Training" naturally carries with it the idea of certain things, and especially that of systematic regulations for imparting knowledge. To talk of Industrial Training or its methods, therefore, suggests the careful organization of teaching. Outside of a few trades, however, one of the characteristics of modern London is the absence of any system or uniformity. Usually a trade can be learnt and taught in a variety of ways, and in individual cases the work is often very carefully done. But on a more general view the existing state of affairs is the very reverse of what the idea of training conveys. The conditions under which boys are engaged and paid often render systematic methods impossible; and so the workman, instead of being taught his business, may rather be said to "get to know" it, or in the better-known phrase "he just picks it up."

The use of the expression Industrial Training, therefore, contains no necessary reference to any systematic teaching. What will be done, will be to describe how the boy of to-day starts in life, and how he "gets to know" a trade. In so doing, it will be necessary to point out the difference between the results flowing from this "getting to know" and those that are attained in such trades as possess a proper system in the true sense. Present conditions involve, moreover, a further very considerable amount of "not getting to know," and, therefore, to the main subject of "how boys learn trades" must be added the scarcely less important one of "how boys do not learn trades."

The problem, in fact, is threefold. First, there is that of how boys learn, which covers the different modes in

which they enter an occupation, and the form of industrial engagement under which they work. This involves questions such as Regular Service in one firm *versus* Migration, the apprentice and the improver, "picking up," working as a mate and so on. It also considers the question of whether any contract to teach is actually entered into, and if so, what are its conditions, and also whether it still guarantees actual teaching or merely gives the "opportunity to learn."

Secondly, there is the problem of how boys are taught. The distinction between this and the preceding one may not be very clear, but it is nevertheless of some importance. For having discovered the general terms and conditions under which a boy sets out to acquire a trade, we then have to consider how these are carried out in detail. The former are important and will vary in value according as they are adapted to the trade concerned; but the way in which they are actually carried out is of equal moment. Under this heading, therefore, are included the different arrangements made for teaching, the part played in them by the employer, the foreman and the boy's fellow-workmen, the relation of the shop to the Trade School, and various questions regarding wages, hours and other conditions. This second problem, indeed, is very closely allied to the first and often their results vary together. But this is not always so. For, on the one hand, the actual teaching may be excellent where there is no definite system, and on the other regular Apprenticeship may be used by a certain type of firm as a means of exploitation.

Moreover, existing methods have to be judged, not only by their value to the boys who actually do fit themselves for definite occupations,<sup>1</sup> but also by the proportion which these bear to the whole boyhood of the nation. Hence a third problem arises, as to how, and why, boys do not learn trades, and this is what is known as the problem of Boy

<sup>1</sup> The term occupation may be used to denote all employments, of whatever level of skill, which give a permanent livelihood at a man's wage. }

Labour. It is a necessary part of that of Industrial Training, because the effectiveness of any system must be judged by its results as a whole, that is, not only by those it does train more or less successfully, but by those whom it fails to train at all. We have to discover, therefore, the extent to which existing methods cause, or fail to prevent, a portion of each generation from growing up without either a trade or a settled occupation of any kind, and the character and causes of this wastage. This subject, therefore, includes not only Blind Alley employments which come to an end after the close of boyhood, but the shifting of boys casually from one unskilled job to another, the putting of them to unsuitable employments, and the generally wasteful methods of recruiting a great number of trades.

To deal with this threefold problem, therefore, the following method will be adopted. After the more important terms have been defined, the existing state of affairs in London will be briefly described, with particular reference to its special peculiarities and difficulties. Each of the chief methods of learning a trade will then be separately dealt with, the area which it covers will be considered, and its value estimated. Coming to the second problem, the ways of selecting a job and making a start in life will lead naturally to the actual means of teaching adopted in different workshops. This again will be followed by the work of continued education, whether in trade, technical or ordinary evening schools, and by a brief consideration of the influence exerted by the increased use of machinery and by the influx of provincial workmen into London. After this I shall deal with the problems of Boy Labour. Finally, in surveying the whole, I shall consider the relation of methods of training to Unemployment, and summarize both the work of existing agencies and the chief proposals now before the public. Future policy can then be considered in reference to its two main lines of development—the Organization of Boy Labour and improved Industrial Education.

My enquiry has been confined to the training of boys and no attempt has been made to deal with that of girls.

For with the latter so many considerations enter which are not present in the case of the former, and a woman's connexion with industry differs so much from that of a man, that it seemed wiser to confine oneself to the one sex. The women's question, I am aware, is no less urgent and equally needs investigation : but in many respects it is a second separate problem rather than a branch of the same one ; and to consider the two together would only create confusion.

In carrying out this enquiry I usually adopted a method that was somewhat as follows. In each case I took, to begin with, certain trades or groups of trades, and obtained interviews with as many members of them as time permitted—employers, foremen, representatives of the workmen and the boys themselves. It was thus possible to get at least a fair sample of each and of the method or methods employed in it. For this purpose I drew up a series of questions, copies of which are printed in an appendix, which enabled me to give those from whom I was seeking information a clearer view of my objective. The Trade Schools and Technical Institutes gave me my best opportunity of getting into touch with the boys themselves : and thanks to the courtesy of Principals and Teachers, I was able to interview a number who were actually engaged in learning different industries. I also carried my enquiry into the side of the subject that is connected with the work of the School Care Committees and with the placing of boys in employment through Labour Exchanges and other organizations.

In conclusion, I desire to record my most sincere thanks for the uniform kindness and courtesy with which I have been received on all sides, and for the immense amount of trouble that has been taken on my behalf. Above all, for the way in which I was received by employers of labour and their foremen, I can never be sufficiently grateful. To many of them I was practically a complete stranger, yet only in the very rarest cases was information refused, even where the giving of it occupied a considerable amount of

time. But from all sides the assistance accorded to me was very great, and officials of Labour Exchanges, of Trade Unions and of other Societies, and, above all, the Principals and Instructors of Trade Schools were quite ungrudging in their help. The only return, beyond these few feeble words of acknowledgment, which I can make to all this kindness, is that of using to the best of my ability the information placed so generously at my disposal.

## II. TRADES AND INDUSTRIES OF LONDON.

I shall conclude this chapter by a brief analysis of the numbers of male persons employed in the chief industries of London. In attempting to obtain an accurate estimate of these, much difficulty is caused by the necessity of including those surrounding areas which are covered by the name of Outer London. For some time past London has been extending itself into suburban districts, which have come more and more to act as the "dormitories" of those who are working during the daytime within the county boundaries, whilst some manufacturers have also removed their works into them. To the whole area, which includes both the County and the Outer Ring, the name of Greater London may be given.

The recent Census in its Preliminary Report and Tables <sup>1</sup> gave the following return of the total numbers living in the Urban and Rural Districts of Outer London :—

| County.                            | Urban Districts. | Rural Districts. |
|------------------------------------|------------------|------------------|
| Essex . . . . .                    | 839,076          | 10,676           |
| Hertfordshire . . . . .            | 45,390           | 9,519            |
| Kent . . . . .                     | 148,485          | 23,855           |
| Middlesex . . . . .                | 1,078,556        | 48,138           |
| Surrey . . . . .                   | 438,715          | 87,592           |
| Total : Outer Ring of London . . . | 2,550,222        | 179,780          |

<sup>1</sup> Cd. 5705 of 1911.

So far the matter is fairly simple. The difficulty really begins with the investigation of the numbers employed in separate industries, and more particularly in individual trades, since detailed returns for some of the latter are not given in all cases. Moreover, the trade distribution of a County as a whole is not necessarily the same as its London areas. This is particularly true of Kent, which employs considerable numbers in certain small trades, such as paper and cement making, which are practically non-existent in any part of London. Compared, therefore, with the County of London, for which actual returns are available, some of the figures for Outer London<sup>1</sup> can only represent a rough approximation.

In arriving at an estimate I have omitted the very small proportion of the population of the latter that is living in rural districts. For the urban I have made it on the following lines.<sup>2</sup> Middlesex presents no difficulty, since all its urban districts are inside the outer boundaries of London. In the case of Essex, the returns for its five chief urban areas are taken, since detailed figures are available for them and not for the others. They are the Boroughs of East and West Ham and the Districts of Ilford, Leyton and Walthamstow. All the urban districts of Surrey are included, and those of Kent are entirely omitted. For the reasons already given, the trade distribution of the latter county is different from that of its London districts, whilst that of Surrey is likely to be similar: and to omit the one and include the whole of the other promises to give a more accurate estimate. The numbers added in the case of Surrey are not very much larger than those omitted in that of Kent. Finally, as the Hertfordshire urban districts are very largely dependent upon London, even if they are not within its actual boundaries, a large proportion of them—two-thirds—has been

<sup>1</sup> Except in the case of Middlesex.

<sup>2</sup> The method adopted which appears to be the best available I owe to the kind suggestions of Professor A. L. Bowley, to whom I wish to express my gratitude for kind help and criticism in connexion with the statistical subjects of this book.

taken.<sup>1</sup> Where separate returns are given for individual trades in London and not in the counties, the relative proportions between them have been taken to be the same in the latter as in the former.

The following table gives the totals of men and boys over ten years of age engaged in the chief occupation groups in the County of London, in Outer London, in the whole of Greater London, and in the Rest of England and Wales. It also shows the proportional size of every such group by showing the numbers employed in it for each 10,000 of the occupied population.

This table illustrates the chief characteristics of London industry. Natural and other causes have brought about the almost entire absence of certain occupations—notably Agriculture, Mining and Quarrying, Fishing and the Textile Trades. Together these four account for about 2,660,000 male persons out of about 9,289,000 in the rest of England and Wales. The absence of three of them is due to purely natural causes which are partly responsible in the case of the fourth, the Textile Trades.<sup>2</sup> Those Londoners shown to be employed in these groups are mainly occupied in retail work and in certain small trades like rope and canvas making, whilst more than two-thirds of those classified under Agriculture are nursery gardeners, though some living on the very outskirts are no doubt actual agricultural labourers. The rest were probably either owners or employers or too newly arrived in London to have found a new occupation. Other trades which hardly exist there, include the making (as distinct from the working) of iron, steel and other metals, the cutlery and allied trades and the manufacture of bricks,

<sup>1</sup> "The net result of this method of estimating is to reduce the total population of Greater London by some 150,000, or about 6 per cent. The omissions consist of about 180,000 in the rural districts, and 148,000 and 89,000 respectively in the urban districts of Kent and Essex. In the urban areas of Surrey and Hertfordshire the numbers included exceed those returned for Greater London by about 183,000 and 84,000 respectively.

<sup>2</sup> Dealers account for 27,663 male workpeople out of a total of 34,523 in the textile trades, and for 3,294 out of 5,947 in mining and quarrying.

## OCCUPIED MALES OVER 10 YEARS OF AGE.

## THE PROBLEM STATED.

II

| Industry.   | Numbers Employed. |             |                 |                            | Numbers Employed Per 10,000 of the Population. |             |                 |                            |
|---|-------------------|-------------|-----------------|----------------------------|--|-------------|-----------------|----------------------------|
|   | County of London. | Outer Ring. | Greater London. | Rest of England and Wales. | County of London.                              | Outer Ring. | Greater London. | Rest of England and Wales. |
| 1. Government . . . . .                                       | 59,475            | 30,781      | 90,256          | 158,368                    | 424  | 405         | 417             | 170                        |
| 2. Defence . . . . .  | 17,243            | 9,664       | 26,907          | 178,910                    | 123  | 127         | 124             | 103                        |
| 3. Professional Occupations . . . . .                         | 60,705            | 38,953      | 108,658         | 258,920                    | 496  | 512         | 502             | 279                        |
| 4. Domestic Work . . . . .                                    | 58,967            | 28,161      | 87,128          | 300,549                    | 420  | 370         | 403             | 324                        |
| 5. Commercial Occupations . . . . .                           | 137,539           | 94,533      | 232,072         | 434,427                    | 979  | 1,244       | 1,072           | 468                        |
| 6. Conveyance and Transport . . . . .                         | 246,093           | 115,524     | 361,617         | 1,037,777                  | 1,752  | 1,520       | 1,671           | 1,117                      |
| 7. Agriculture . . . . .                                      | 7,766             | 25,681      | 33,447          | 1,107,068                  | 55   | 338         | 155             | 1,192                      |
| 8. Fishing . . . . .  | 107               | 40          | 147             | 24,092                     | 1  | 1           | 1               | 27                         |
| 9. Mining and Quarrying . . . . .                             | 3,373             | 2,574       | 5,947           | 1,033,136                  | 24   | 34          | 27              | 1,112                      |
| 10. Metals, Machines, Implements and Conveyances . . . . .    | 112,302           | 64,461      | 176,763         | 1,300,334                  | 800  | 848         | 817             | 1,400                      |
| 11. Precious Metals, Watches, Instruments and Games . . . . . | 27,205            | 12,859      | 40,064          | 59,867                     | 194  | 169         | 185             | 64                         |
| 12. Buildings and Works of Construction . . . . .             | 126,941           | 90,383      | 217,324         | 728,803                    | 904  | 1,189       | 1,004           | 785                        |
| 13. Woodwork and Furnishing . . . . .                         | 60,065            | 22,794      | 82,859          | 170,943                    | 428  | 300         | 383             | 185                        |
| 14. Brick, Cement, Pottery and Glass . . . . .                | 7,436             | 3,478       | 10,914          | 123,800                    | 53   | 46          | 50              | 133                        |
| 15. Chemicals, Oil, Soap, etc. . . . .                        | 21,110            | 13,686      | 34,805          | 100,368                    | 150  | 180         | 161             | 108                        |
| 16. Skins, Leather, Hair and Feathers . . . . .               | 19,558            | 6,133       | 25,691          | 57,781                     | 139  | 81          | 119             | 62                         |
| 17. Printing and Paper . . . . .                              | 63,767            | 28,626      | 92,393          | 127,258                    | 454  | 377         | 427             | 137                        |
| 18. Textile Fabrics . . . . .                                 | 22,899            | 11,424      | 34,323          | 537,088                    | 163  | 150         | 159             | 578                        |
| 19. Dress . . . . .   | 81,780            | 27,058      | 108,838         | 330,277                    | 582  | 356         | 503             | 356                        |
| 20. Food, Tobacco, Drink and Lodging . . . . .                | 155,493           | 77,724      | 233,217         | 680,348                    | 1,107  | 1,023       | 1,078           | 732                        |
| 21. Gas, Water, Electricity and Sanitary Services . . . . .   | 16,772            | 11,396      | 28,168          | 74,071                     | 119  | 150         | 130             | 86                         |
| 22. Other Workers and Dealers . . . . .                       | 88,657            | 44,173      | 132,830         | 464,272                    | 630  | 581         | 614             | 500                        |
| Total . . . . .   | 1,404,262         | 760,106     | 2,164,368       | 9,289,299                  | 10,000   | 10,000      | 10,000          | 10,000                     |
| Total Males over 10 years of age unoccupied . . . . .         | 271,589           | 171,858     | 432,255         | 1,765,280                  |  |             |                 |                            |

cement and paper, and, except in one or two branches, of glass and pottery.<sup>1</sup> Again in Engineering and the Metal Trades generally London employs less than the normal proportion, except in electrical work and in one or two smaller branches, such as tinsmithing. In Engineering proper there is comparatively little new construction, and this is even more true of Boilermaking and Ship-building in which London has ceased to be anything more than a repairing centre.

On the other hand, London shows an enormous preponderance in Commercial, Transport and Distributive Work. In 1911 the two former employed respectively 1,072 and 1,671 per 10,000 of the population in Greater London as compared with 466 and 1,117 in the rest of England and Wales, whilst dealers and shopkeepers reached 1,263 in the case of the former and only 801 in that of the latter. Together this means that these occupations employ in London more than 350,000 persons beyond the normal proportions.<sup>2</sup>

Nor is London's advantage confined to them; for it is almost equally great in some classes of manual labour, and among these are included some industries in which the level of skill is highest. This advantage is greatest relatively in the Paper and Printing trades, in the Precious Metals and Instruments group, and in Wood, Furniture and Leather work. It is somewhat less marked, but still very considerable, in the Building Trades. Together these five sections employ in Greater London about 180,000 workers more than the normal. There is also some excess in certain other cases in which the level of capacity is on the whole lower, notably in the Clothing and Boot Trades, in some forms of food production, and in the manufacture of candles, soap, glue and similar products.

When the comparison is made between the actual size of different occupation groups in London, rather than between

<sup>1</sup> Also salt, alkali, felt hats, gloves and straw plaits.

<sup>2</sup> The proportion per 10,000 of the population for the Rest of England and Wales is regarded here as the normal proportion, and *not* that for the whole of them, including Greater London.

their relative positions there and elsewhere, Conveyance of Men, Goods and Messages is easily the largest, employing over 355,000 in Greater London, and Commercial Occupations (224,846) come next. Of the more purely industrial sections that of House Building and Works of Construction, which also includes more than 200,000 workers, is easily the largest, with the Engineering and Metal Group second with 173,756, or, exclusive of dealers, 163,246. Other important industries are Clothing (107,067), Paper and Printing (90,748), and Woodworking and Furniture (81,691). The Precious Metals and Instruments Group employs 39,346, and the Skins, Leather and Hair Trades 25,400.<sup>1</sup>

More fully to understand, however, the distribution of London industry between different classes and grades of labour, a different subdivision of employments has been made under the following headings:—

*A.* Industries almost non-existent in London. These are Agriculture (except Market Gardening), Mining and Quarrying, the Textile Trades, the Conversion of Metals and the Manufacture of Salt and Alkali. Wherever possible, however, dealers have been excluded and placed in with the Distributive Trades.

*B.* Clerical Employments.

*C.* Higher Branches of Labour, other than Manual and Clerical—including the Police, Private Coachmen, Grooms and Chauffeurs, Cooks and Waiters in Hotels and Restaurants, and so on). They have been classed separately from skilled manual labour, but appear to possess a similar social standing.

*D.* Skilled Manual Labour.

*E.* Semi-Skilled Manual Labour.

*F.* Unskilled Manual Labour.

*G.* Distributive Trades.

1. Dealers and Shopkeepers.<sup>2</sup>

2. Hotel, Eating House, and Public House, Service.

3. Messengers, Porters and Newsboys.

<sup>1</sup> The question of the Distribution of Londoners between trades and occupations is considered in fuller detail in Appendix II.

<sup>2</sup> This Class includes all Dealers in the products of the twenty-

*H.* Employers, the higher Professional and Commercial Employments, and the Higher Ranks of Manual Labour (Foremen, etc.). These are only taken where classified under a separate heading, and do not by any means represent the whole number of employers, as where they are included in the total of an industry they have not been estimated.

*K.* Miscellaneous Employments, difficult to classify elsewhere, the most important being the Army and Navy, the Mercantile Marine and the Teaching Profession.

These classes cover the whole of London industry. The estimate of the numbers to be included in each of them was necessarily rough, especially in the case of the skilled, semi-skilled and unskilled manual workers. Trades were allocated so far as possible to one grade or other according to the amount of skill which appeared to be involved. When there were different grades of labour within a trade, its workers were then divided between them in such proportion as seemed likely to meet each case, and where possible, official reports on wages were used to get an approximate idea of this.

Finally, to sum up the general position of London industry, its most marked features are the very large amount of clerical employment it affords and the very great prominence of transport, dealing and distributive work. Altogether, with the addition of the police force and the domestic services, they employ more than half the population. The manual trades are on the whole in a deficiency, largely owing to the absence, mainly from natural causes, of certain large industries, and to a lesser degree to the comparatively small size of some others. Nevertheless, London has a

two main groups for whom separate figures are given, and also the following occupations :—Art Dealers : Oil and Colourmen : Ironmongers : Stationers : Booksellers and Newsagents : Drapers and Linen Drapers : Clothiers : Hosiers : Milkmen : Cheesemongers : Butchers : Fishmongers : Poulterers : Corn Merchants : Confectioners and Bakers in retail work : Grocers : Greengrocers : Fruiterers : Tobacconists : General Shopkeepers : Pawnbrokers : Costers and Street Sellers.

# THE PROBLEM STATED.

15

| Group.  | Greater London.   |                               | Rest of England and Wales. |                               | Approximate Number to be Employed in London at Normal Proportions. <sup>1</sup> | Approximate Actual Excess (+) or Deficiency (—) in London. <sup>1</sup> |
|---|-------------------|-------------------------------|----------------------------|-------------------------------|---|---|
|   | Numbers Employed. | Per 10,000 of the Population. | Numbers Employed.          | Per 10,000 of the Population. |   |   |
| A. Trades Practically Non-existent in London . . . . .  | (1)               | (2)                           | (3)                        | (4)                           | (5)   | (6)   |
| B. Clerical Employments . . . . .   | 21,568            | 100                           | 2,650,164                  | 2,863                         | 619,659   | —598,091  |
| C. Higher Branches of Labour (other than Manual) . . . . .  | 270,801           | 1,251                         | 496,646                    | 535                           | 115,794   | +155,007  |
| D. Skilled Manual Labour . . . . .  | 114,458           | 529                           | 420,814                    | 453                           | 98,046  | +16,412   |
| E. Semi-Skilled Manual Labour . . . . .   | 482,514           | 2,229                         | 1,712,289                  | 1,843                         | 398,893   | +83,621   |
| F. Unskilled Manual Labour . . . . .  | 329,035           | 1,520                         | 1,079,777                  | 1,162                         | 251,500   | +77,535   |
| G. Distributive Trades—<br>i. Dealers and Shopkeepers . . . . .<br>ii. Hotels and Eating House Service,<br>iii. Messengers, Porters, etc. . . . . | 306,687           | 1,417                         | 1,077,932                  | 1,160                         | 251,067   | +55,620   |
| H. Employers (so far as separately classified): Higher Grade Professional and Commercial Employments . . . . .                                    | 273,381           | 1,263                         | 744,054                    | 801                           | 173,366   | +100,015  |
| K. Miscellaneous Employments (Army, Navy, Merchant Service, the Teaching Profession, etc.) . . . . .  | 49,679            | 230                           | 122,127                    | 132                           | 28,570  | +21,109   |
|   | 107,417           | 496                           | 209,950                    | 226                           | 48,915  | +58,502   |
|   | 126,162           | 583                           | 312,753                    | 337                           | 72,939  | +53,223   |
|   | 82,666            | 382                           | 453,793                    | 489                           | 105,838   | —23,172   |
| Total . . . . .   | 2,164,368         | 10,000                        | 9,289,299                  | 10,000                        | —   | —   |

<sup>1</sup> The totals in column 5 are not quite identical in column 1 owing to the fact that by ignoring fractions in column 4 the total comes to 10,001 and not to 10,000. For the same reason the excesses and deficiencies in column 6 fall to balance by about 200.

great artisan population spread over a large number of employments, and in some of them it has obtained a preponderating share. These last include some of the most highly skilled occupations of all. In size the most important of them are Building, Printing and Bookbinding, the Precious Metals and Implements Group, and the Woodworking Trades.

The third of these needs further mention. It is a collection of comparatively small industries in nearly all of which London has a marked preponderance. To it should be added certain other small trades placed by the Census in the Engineering and Metal Group. It then includes gold and silver smiths, silver spinners, chasers, engravers, jewellers, die sinkers, diamond setters and mounters and general art metal workers. The Precious Metal Trades alone really form a group of their own, but with them are also included the various employments devoted to the making of surgical and scientific instruments and to the manufacture and repair of watches and clocks. Finally, there is the pianoforte trade, which again is subdivided into an almost bewildering variety of processes.

Again, in leather work London employed in 1911 an excess of workers in almost every branch. There is a large tailoring industry employing various grades of labour, from the highly skilled workmen of the retail (bespoke) trade to the sweated women workers. The manufacture of boots and shoes also employs a large number and is mainly semi-skilled factory work. It also, however, provides a good deal of high grade labour in the bespoke trade. Again, in the Engineering and Metal Group, though the conversion of the ore into metal is not carried out in London, though there is comparatively little founding, and though ship-building is almost entirely confined to repair work, yet in some of the most important branches there is only a moderate deficiency, and London still appears to be the chief centre of some of the smaller ones.

Such in brief is the industrial character of London. The figures given here, it must be repeated, are only a rough

estimate. Apart from the County of London, the Census did not give the minuter details, and so the numbers engaged had to be estimated, as had the proportions of skilled and other workers. The description that has been given, therefore, can claim at best only an approximation to accuracy, though it does profess to give a fair general picture of the conditions of London Industry.

## CHAPTER II

### DEFINITION AND CLASSIFICATION.

Loose popular Use of Terms—Apprentice and Apprenticeship : Original Meaning—Generic Uses—Regular Service ; Its Forms : Formal Apprenticeship, Verbal Apprenticeship, Employment during Good Behaviour, Working and Learning—The Learner—Possible Use of the Term—Relation to Forms of Regular Service—The Improver : Original Meaning—The Migratory Improver ; His Characteristics—Lad, Boy—Following-Up : Working in Pairs, Mates ; Working in Squads—Method of Following-Up—Picking Up : Possible Meaning ; Limitation to Semi-skilled Labour—Characteristic of New Classification of Methods—Boy Labour—Its Two Meanings—Its Three Forms : Blind Alleys ; Partial Blind Alleys ; Wasteful Recruiting of Skilled Trades—Real Nature of the Boy Labour Problem—Skilled, Semi-skilled and Unskilled Labour—Possible Classification and Definition : (1) By Wages Received, (2) By Length and Character of Training—Other Possible Classifications of Labour.

MANY of the terms in common vogue in connexion with this subject are used very loosely indeed in popular discourse, and their different meanings, therefore, require careful preliminary consideration. One instance of the confusion which may arise has already occurred. To the ordinary observer the phrase Industrial Training implies some systematic mode of taking boys and imparting knowledge to them. But if this, its natural meaning, were to be rigidly adhered to, it would narrow too much the scope of the enquiry. For under present conditions a large number of workers are not trained in the strict sense, but "get to know" their trades, and therefore the subject is rather how they do the latter, whether by definite training, by teaching themselves, or by "picking them up" more or less haphazard. With most of the terms indeed the difficulty lies in the number of separate shades of meaning

which attach to them, and it is necessary to state what these are and then to choose those which correspond most nearly to the actual facts.

The first which need consideration are those of Apprenticeship and Apprenticeship. It is not necessary to go back to their etymological origin. But originally Apprenticeship signified a definite legal agreement by which the boy was bound to his master for so many years to learn his trade. Each side strictly contracted with the other, the one to give service, the other instruction, and the contract was legally enforceable. Under the Domestic System, this method was almost universal. Now, however, the legally binding agreement is only one device among many and in some trades, notably in London, it is the exception rather than the rule. Strictly speaking, therefore, the term only applies to such formal indentures, and sometimes it still has this meaning attached to it. At others it obtains a far wider signification.

By many persons, more particularly employers of labour and their foremen, it is used generically to cover the position of all those boys who are learning a trade under whatever form of engagement: and therefore, where apprentices are said to be taken, a further inquiry is usually necessary to discover the conditions under which they are employed. To take apprentices does not necessarily involve the existence of a binding by indenture; and sometimes where I was informed that no apprentices were taken, further inquiry showed that no boys at all were being taught. Thus the term is applied to practically all who are in a firm for the purpose of learning, usually with the proviso that there is some idea or understanding to this effect. For instance, the boy or youth who is merely spending a certain time in a workshop and learning what he can before moving elsewhere, would hardly be included under even the widest sense in which it is used. But the word would apply to all boy learners whose engagement and employment are actually permanent. For, as will appear later, the most important distinction to-day is not between the bound

and unbound learner, but between the permanent and non-permanent engagement, or in other words between Regular Service in one firm and Migration from one to another. The generic use of the term Apprentice, therefore, marks an important practical distinction in present-day conditions.

There are, however, a number of different forms which such Regular Service or permanent engagement may take ; and the difference between them is important. Of these some four may be distinguished. First there is Apprenticeship in its original sense with a definite binding agreement. Secondly, there is the unbound apprentice, to whom the name of learner is sometimes applied. He is usually employed under an agreement that he shall remain so many years, receive a certain fixed amount of wages, rising year by year, and be taught, or given opportunity to learn, the trade. Neither side is legally bound, but there is an understanding that the boy shall not be dismissed except for misconduct, nor leave the firm except for ill-treatment or failure to teach. This understanding is usually observed, and in one or two trades this Verbal Apprenticeship, as it is often called, is the normal method of engagement. It marks an intermediate use of the term Apprenticeship, since some persons utilise it in all cases where an agreement of any sort exists, but in no others.

The third form of Regular Service may be defined as Employment during Good Behaviour and resembles in many ways that just described. There is a tacit understanding that the boy shall stay as long as he is satisfactory, shall get certain rises of wages and, if he shows himself suitable, be given the chance to learn. But there is no agreement of any sort, formal or verbal : the boy only stays as long as the employer cares to keep him and he to stay ; and he is a worker who may be called upon to make himself generally useful. Thus many such lads start as errand boys and are only gradually promoted to the bench. Others at first will only work at it in their spare time, being mainly engaged in running errands, or they will sometimes do the latter in the morning and the former

in the afternoon. Sometimes the line dividing the second and third classes is very thin: but the absence of any actual agreement to teach is important. For one thing, the employer is not in this case bound to teach and so the boy may have to wait till opportunity arises. But in many instances he works as steadily with one firm, even if he does not learn so quickly, as he would do where an agreement exists. Decent firms make a point of not dismissing such boys, and decent boys remain so long as their treatment is satisfactory.

Finally there is the form of engagement which may best be described as "working and learning." In such cases, which are not uncommon, a boy simply gets a job at his trade at whatever wages he can command and gradually works his way up, being promoted from one thing to another within the firm, and his wages rising with the value of what he does. He is, of course, always liable to dismissal, but many such boys do get regular employment during the time that they are learning.

All we can say of these four classes is that dismissals are more common in the fourth than in the third, in the third than in the second and in the second than in the first. This shows further the importance of the actual fact of permanence. If the boy is kept on, his position is one of Regular Service, if he is compelled to wander from firm to firm, he falls into another class. The vital distinction rests on the permanence of the engagement and not on the existence or non-existence of a contract of service.

Before considering, however, the sense in which the term Apprenticeship can best be used, it is necessary to consider the meaning to be attached to the word "Learner." The term is one of recent growth. Hitherto it has been given either no very clear meaning, or else one that is so wide as to be almost valueless. It is more commonly used in reference to girls. With the various Associations that are dealing with the placing of boys, however, it has obtained a very definite signification. Those whom they place are divided into two classes—apprentices formally bound and

learners under a verbal agreement. The employers also sometimes use the two terms in a similar sense. Perhaps, however, the latter can be most usefully employed to signify all boys engaged under any form of Regular Service other than Formal Apprenticeship, and in this sense it will be generally used. Sometimes, on the other hand, it will be necessary to apply it in its most general sense to cover all who are actually learning, and to contrast the boy learner with the boy labourer.

It seems best, therefore, in dealing with the class we have just described—that is to say, those who learn under a continuous engagement—to adopt the expression learning by or under Regular Service. Apprentice and Apprenticeship, without qualification, may be confined to the formal indenture, and the term Verbal Apprenticeship to agreements of the second kind. The term learner will then, as just described, be useful to distinguish informal service generally from formal, especially when, as in Chapter X, it is necessary to contrast the two. The other two forms of Regular Service may then be denoted in the phrases already used, as “employment during good behaviour” and “working and learning.”

Another common expression is that of Improver. Originally it signified a young worker who had served his Apprenticeship and, not yet being a fully competent workman, was engaged for the time being at a lower rate than the latter could command, until he had made himself fully efficient. This is one of the senses in which it is still used : and where some form of Regular Service is predominant, such improvers as there are, are of this type. The number of such improvers is being further increased by the growing practice in one or two trades of binding for a shorter period of three or four years, which is found to give a youth sufficient grounding to make him a “good improver” and enable him to work his way up either in his own or another firm. The demand for such an engagement, indeed, is increasing and likely to continue to do so, more particularly where modern conditions render it difficult, if not

impossible, for any one firm to teach the whole of a trade.

This, indeed, really constitutes a partial modification of the Regular Service rather than an alternative method. In some industries, however, the custom of moving about from firm to firm almost from the very beginning has created a new and distinct type of improver. For workers may thus be described who in this way "pick up" their trades without entering into any engagement for the purpose or enjoying continuity of employment over an extended period. The process is as follows. A lad starts in a shop and gets some slight knowledge of his trade, which he may do in various ways. Having accomplished this he moves about to one firm after another, acquiring one thing here, another there, either as he needs new experience or wants higher pay or because he has been dismissed from his previous job. This modern type again resembles the older one both in the fact that improvement is still needed to make him a tradesman, and also for the reason that he has already made some progress; for no one will rank as an improver until he has acquired some knowledge of the trade upon which to improve.

The vital fact in his position, however, is that he is employed and paid almost entirely as a wage-earner. This marks the great distinction between him and the first three forms of Regular Service. The latter give an agreement, or at least there is an understanding, that the learner shall either be taught or given the opportunity to teach himself.<sup>1</sup> If not, there is a moral, and sometimes a legal, breach of contract. The Improver, or as he will be called the Migratory Improver, is simply a wage-earner, paid for the value of his work, taking his chance of learning and having to acquire the trade for himself as best he can. The employers, since they pay the full value of the improver's

<sup>1</sup> Even with Regular Service, however, boys are paid wages which approach more and more nearly to their full value as workers, and so employers cannot afford to teach them so much as formerly. Still, in its first three forms there is some agreement or understanding that the boy shall have the opportunity to learn. The whole subject will be dealt with more fully in a later chapter.

work, are under no obligation to teach him and often are not in a position to do so, though some of them recognize some kind of obligation to "bring him on." "He (i.e. the improver)," I was told, "would simply get a job, and he would not be supposed to be learning anything, but he would learn just the same." The extent to which this method of learning by migration prevails will be considered later, but at any rate it is of sufficient importance to be contrasted as a method of learning with that of Regular Service, and forms the second main division of the subject.

The sense in which the word Lad or Boy is used is also worth considering. As regards age it is perhaps best to follow a method similar to that adopted under the Factory Acts and to class all those of School Age (i.e. under 14 in London) as children, and all those between 14 and 18 as lads or boys. The term thus corresponds to the "Young Persons" of the Factory Acts, and may be regarded as referring to all non-adult male labour.

There is a certain class of boys, however, whose position has a close connection with the classification we have been considering. In some trades one or two are employed to perform certain small offices and make themselves generally useful about the shop, and where the department is a large one they can if suitable be easily absorbed in the business. Thus their position is different from what it is where boys are engaged in excessive numbers, and it is often through work of the former kind that they get that minimum of knowledge which enables them to get into a trade either as improvers or by some form of Regular Service. Indeed, many firms are now making it their practice to start them as errand boys for six months or so, with a view to putting them to the trade as learners and a few will take them in no other way. Others again promote to the bench any who are sufficiently capable. Instances may be quoted of the Glue Boys in Joinery Works, the "little boy" in the East London Cabinet shops and the Errand Boys in many firms of Silversmiths.

The position of those boys who work as mates or assis-

tants to a skilled man or squad of men, now requires consideration. The term "mate" is sometimes used of two skilled men working together, as in the case of two joiners at a bench, or formerly of two men working a saw. But, more commonly it denotes the less skilled assistant or helper who in certain trades serves the mechanic. The essence of his position is that he is definitely attached to a single man and not like many labourers engaged generally about the shop. The plumber or gasfitter forms a pair with his mate, so do smith and hammerman; and the bricklayer's labourer is usually attached to a particular bricklayer. Similarly in Leather Splitting the skilled man at the front of the machine has a boy or youth to help him at the back, and on the circular saw, the sawyer has one to "pull out" for him. Now in most of these cases a mate's work is a recognized avenue into the trade. His position enables him to learn all about it and after a time to get hold of the tools for himself. The one exception is provided by the bricklayer's labourer,<sup>1</sup> and even with him, though not officially recognized, the learning is frequently and successfully accomplished.

So, too, in certain other cases, the boy who works for a squad of men can "follow up" a trade. So far as I am aware, the term is only used in London in the case of a few processes, the most important being the Rivetting of Boilers: and it is in the Ship-yards that the best examples of it are found. The men engaged work in squads of five, composed of three skilled men—two rivetters and one holder-up—and two boys: and the mode of entry, which will be more fully described later, is that the boy enters the trade at fourteen as a rivet-heater, and at about sixteen becomes a carrier, taking the rivets from the fire to the men. Once he has got to this position he has his chance of "following up" the trade; that is to say, by serving the men as carrier, he first learns how the work is done and then gets hold of

<sup>1</sup> In a later chapter reasons are given for not classing the bricklayer's labourer as a mate of his bricklayer and for not classifying the method by which he learns this trade as that of Following Up.

the tools and learns to do it himself. Only a few are apprenticed in London, the great majority are not, and after so many years the boy is given by the Union a further twelve months within which he must get his full money. A similar method used to prevail in the allied branch of Tank-Making, but the development of machinery has largely altered its character. A boy employed in a "Chair" of Glass Blowers has a somewhat analogous position.

The expression Following-up, however, may be aptly applied to all those trades where a youth works as helper, assistant or mate, either to a man or a squad of men; more particularly as in learning the trade, a similar course is followed in each case. The lad gives several years' service to begin with, not as a learner, but as assistant to a skilled man, and from this proceeds to apply the knowledge he has thus gained, to enable him to work his way up. Again, all such trades differ from those in which either of the two previous methods apply. In them, whether the boy is taught, or gets opportunity to learn or merely teaches himself as best he can, he always starts, either at once or after a few months, to do the actual work which, as a man, he will have to perform, whilst, where "following-up" obtains, he first spends a long period serving and helping the man, but not himself doing the work. "Following-up," therefore, constitutes a third, independent method of entering a trade.

Now these three methods all involve years of training, and apply to employments which can all be classed as skilled. When, however, we come to those which can with more justice be described as semi-skilled, we get a method of entry which is best designated by the word "Picking-up." This, again, bears more than one meaning. To recur to the distinction between "how a boy learns" and "how a boy is taught," the expression is used in reference to both, but more frequently to the second. It will be said in answer to questions upon the point, that "he just picks it up." That is to say, no special arrangements are made, but a boy gradually learns from his work first one

thing and then another. So understood, the term applies with particular force to the Migratory Improver or to those who are "working and learning," whilst more generally, the modern contract to teach often guarantees merely the "opportunity to learn," and it depends mainly on the "grit" of the boy whether he "makes himself a tradesman."

But the expression can, I think, be used to describe the mode of entry into those occupations which require not so much to be taught as simply to be "picked up," that is, into what may be described shortly as the semi-skilled trades. Thus, where much machinery is used, what was once a skilled trade is sometimes split up into a number of separate processes. There is comparatively little to learn, and that little is not very difficult; or even if high skill is needed, it is only in the performance of some single process or in the use of some one machine. A boy goes to a certain process and learns it in a few months, and after this has only to acquire greater experience and rapidity of execution, which sometimes takes longer than the actual learning. In a Boot Factory, for instance, a lad keeps his eyes open and gets to know how some more difficult job is being done and, when opportunity offers, contrives to make a start at it at a rate of wage lower than that which a man obtains, and quickly makes himself efficient. The work, therefore, is not such as to require a long period of training; but it does need a certain amount of intelligence and skill and often considerable practice before the power to turn it out rapidly can be obtained. Hence, the method appropriate to this can well be described as "Picking-up."

Thus, this new classification is based on a regrouping of the older forms. The distinction is made to depend mainly on two things, first on the actual permanency or otherwise of the industrial engagements under which the boys learn, and secondly on the relation of the boy to the man with whom he works. Four main groups have emerged. First there is that of Regular Service, which covers all boys who are, *in fact*, permanently engaged in one firm during their training; and, secondly, Migration, where they move about

from one firm to another. So far, the matter of chief importance has been the fact of permanence. With the third method, that of Following Up, the cardinal point is that, for a long period, the boy is not working at the trade, but serving the man who is. He afterwards works himself up, and may do this entirely in one firm or in several. The fourth method, Picking-Up, applies to the semi-skilled group.

The next term to be considered, namely, Boy Labour, is one of which the definition is far more difficult than it appears to be. Sometimes it is simply used in contrast to adult male labour, but as a rule, when it is used, there is always some implied contrast between labouring and learning. Sometimes it covers only those trades which employ more boys in adolescence than they can find room for in manhood, and at others includes all boys' jobs in and about a factory which may or may not lead to permanent employment. Thirdly, it may refer to all those who, for whatever reason, fail to acquire a trade or occupation of any kind.

In considering this question, two important facts emerge at once. The first is the antithesis between working for wages and learning. Here, Boy Labour is less appropriate than either Boy Labourer or Boy Labouring, but the actual expression is not important, if we keep clearly before our minds the meaning which is given to it. The second and more vital fact is the importance to be attached to failure to learn, whatever its cause. So understood, the Problem of Boy Labour can be stretched to include all forms and conditions of employment, to the extent to which they fail to provide those engaged in them with a permanent livelihood. Thus it covers not only those jobs which from their very nature cannot last beyond adolescence, but those defects of organization or character which in any trade prevent boys learning those things which they set out to master. In short, the problem embraces every kind of failure to acquire a definite occupation, and is not confined to those employments which fail to keep their boys after they reach manhood.

As thus defined, Boy Labour may be divided into three classes. The first of these comprises what are known as the Blind Alley Trades which employ large numbers from the age of fourteen up to from seventeen to twenty, and are compelled to discharge the great majority of them on the threshold of manhood. They thus provide few or no openings for them as adults, and often get rid of their boys at a time when it is difficult for them to learn anything else. A good example of this was formerly provided by the conditions of the Boy Messengers in the employ of the General Post Office. These, however, have since been practically revolutionized, and their work is no longer open to this reproach. In short, the Blind Alleys are "isolated" boys' jobs, that is to say, they have to be performed by boys, they terminate with boyhood, and they do not lead directly or indirectly to any permanent employment.

The second class of Boy Labour consists of trades in which both boys and men are needed, so that employment in them as a boy can, and sometimes does, lead to engagement as a man. The proportion between them, however, is such that only a fraction of the former can find permanent places and the rest have earlier or later to betake themselves elsewhere. Being usually skilled and highly paid, they require a long period of training, and those who do enter them are well provided for. This applies especially to those trades in which the method of Following-Up obtains; for work as an assistant to a man is a recognized avenue into them, but where each man has one such assistant, some of them have to go sooner or later to other jobs. Probably, therefore, the most suitable name for them is that of Partial Blind Alley.

The third class is composed of all boys who attempt to enter an occupation, and either fail to do so altogether, or do not become fully competent at it. Such failures spring from a variety of causes. Thus, more boys have to enter a trade than it can find room for, and yet they will be no more than enough to provide it with a sufficiency

of skilled men. Boys drift into it and out again ; they start to learn it, but are unable to do so, or they only learn a part of it. Hence, many trades require a Reserve of Boy Labour. Great friction and waste result, and many who enter one or other of them grow up without any definite occupation, or at best only reach the casual fringe of one. These failures, therefore, form a third type of Boy Labour, and may be referred to as the Wasteful Recruiting of the Skilled Trades. It is true that similar waste occurs in the lower grades of labour, but it is in connexion with the higher that it obtains its greatest importance.

The term Boy Labour, therefore, must be used in two senses. Its most natural meaning is to signify either those forms of work that employ boys and boys only, or those that employ more than they can absorb as men. But in any kind of trade or job, boys may reach manhood without possessing a definite occupation,<sup>1</sup> for one or other of the causes just mentioned. Analysing results, therefore, we find that the problem must be extended to cover the failure of some boys in all walks of life to fit themselves for the future. The boy in the Blind Alley may get successfully into some fresh business, and so it does not prove a Blind Alley to him, whilst the boy in the skilled trade, by failing to learn it, may grow up unfitted for anything at all. Thus, the latter may be the greater difficulty, though the former runs the greater risk. Hence, whilst in the first place the term Boy Labour attaches itself naturally to the Total or Partial Blind Alley, the real problem is a wider one.

Finally, the meaning of the expressions Skilled, Semi-Skilled and Unskilled Labour must be considered ; and they require to be used with caution. It is contended, and rightly, that scarcely any employment is absolutely unskilled, and for this reason the term low-skilled is sometimes preferred. At the same time variations in the amount of skill are so great as to justify the ordinary distinction.

<sup>1</sup> The term *occupation* will be used to cover all forms of labour which do give permanent employment throughout life, whatever their grade of skill. The word *trade*, if used without qualification, will denote skilled manual employment of a permanent character.

The dividing line between the three grades is, however, far from clear. Sometimes, as in the Building Trades, there is a rough division into artisans or tradesmen, and labourers. Elsewhere, it may be almost accidental, the result of habit, of a rough calculation from wages, or even of the particular arrangements of the employers. Such a practice, however, may result in workmen engaged upon an identical operation being classed in different grades. Hence, the distinction between them should be based, as far as possible, on some definite principle, difficult though this may often prove, and thus a few clear divisions can be substituted for numerous and minute shades of difference.

One possible course is to rely upon the rates of wages paid for different kinds of work, but on examination this proves to be little more than a useful check on other methods. There do not exist any statistics of wages that are adequate for the purpose, and a further objection to their use is found in the many elements, besides the skill involved, which help to determine them. Thus, great physical strength or great irregularity of employment will help to raise them, and low wages may be due to a variety of causes such as payment in kind, competition of female or child labour, and above all security of tenure, whilst, lastly, inequality between trades may merely reflect differences of organization.

On the other hand, measurement by the amount and length of training is easier and more satisfactory. Variations in skill within a trade which are brought about by the use of machinery, by specialization or by other reasons, can thus be far more adequately classified. The time taken to learn is likely to be pretty constant between one place and another, whilst rates of wages vary. The distinction between skilled and other grades of labour, therefore, will follow closely the divisions already outlined between the different forms of training. Thus, *Skilled Labour* may be defined as all such as requires a long period of service, whether under a definite contract or agreement and in a single firm, or with no such agreement, the learner moving about from firm to firm. This class, there-

fore, will include all who are learning by the first three methods of Regular Service, Migration and Following-Up. Secondly, *Semi-Skilled Labour* includes those trades or processes which can be acquired in a comparatively short time. Nevertheless, it is distinguished from the third or unskilled class by the modicum of knowledge, skill and rapidity of execution which it requires. It is, in short, the grade whose training is covered by the fourth method of Picking-Up. Lastly, *Unskilled Labour* is such as possesses the minimum of skill and knowledge, since no labour is absolutely unskilled, and therefore does not require nor receive any definite period of training. Such knack as distinguishes a good from an inefficient unskilled labourer comes by practice, except so far as it depends on discipline and ordinary common sense. This, at any rate, seems to be the best way of differentiating these grades, though it must never be forgotten that no absolutely hard and fast lines can be drawn between them.

Finally, there are two other ways in which it might be possible to distinguish them. The semi-skilled class is largely made up of men who are working and minding machines. Hence, they might be divided into Artisan or Mechanic, Machine-Minder and Labourer, but there is a fatal objection to this, in that some important classes of workers, such as carmen, are something more than labourers, are not to be classed as artisans, and yet do not work upon machines. They are, in fact, of the same grade as the machine minder, but they are not machine-minders. For this reason, therefore, the general term semi-skilled is far more adequate. Another classification, which avoids the use of the term unskilled, is into Artisans, Skilled Labourers and Labourers. But though it has this one advantage, it is clumsy, and to the ordinary man, far from clear. And, above all other possible classifications the division into skilled, semi-skilled and unskilled<sup>1</sup> has the merit of being generally accepted and well understood, and for that reason can best be retained.

<sup>1</sup> The term *low-skilled* will be used in a general sense to cover both semi-skilled and unskilled labour in contrast with skilled.

## CHAPTER III.

### EXISTING CONDITIONS IN LONDON.

Industrial Peculiarities of London shared to a lesser degree by other big towns—London a commercial centre and the seat of government—Comparatively small proportion of skilled manual labour—Other peculiarities intensified by its size.

1st Peculiarity: Absence of Localized Industries—Advantage of them when large—Their disadvantages—Those that exist in London only partially localized (Ship Repairing) or small (Art Metal, Scientific Instruments, Pianofortes, Leather)—Exceptions: Tailoring, Boot-making, Cabinet Making—Special Defects of Existing Localized Industries.

2nd Peculiarity: London a centre of Repair and Retail work—Forms and character of such work—Typical Instances—Its Disadvantages and Advantages—Growth of Specialization—Its Two Forms—Specialization of Processes—Its Effect on the Workman—Tendency to create new forms of Boy Labour—Its Partial Development in London—Specialization of Product or Output—A Marked Feature of London in Cabinet Making and Silversmithing—Increased Difficulty of Learning—Two Particular Cases of Specialization—Improvers' Work—Specialization between different localities—Cabinet Making and Furniture.

3rd Peculiarity: Influx of Workmen and Efflux of Work—Summary of Previous Treatment.

Results of these Peculiarities—Irrregularity of Teaching and Learning—Excessive Supply of Labour—Features of London Training—Absence of System and Mixture of Methods—Resulting Evils—Difficulty of Finding Openings—Subordination of Learning to Earning—Resulting Influence on London Industry.

In its relation to the methods of Industrial Training that are in vogue there, London has characteristics that are either peculiar to it or else are found in it to a more marked degree than in other places. A recent investigation drew a distinction between different towns mainly in reference to casual labour. First of all came London, where it was shown to be exceptionally prevalent; then the other capitals, as they were called—Manchester, Liverpool, New-

castle and so on—which are rather commercial and distributive than manufacturing centres, though with them this feature is not so marked as in London. Still in them casual labour is very common. Thirdly, there are the manufacturing towns proper, where it exists, but in more manageable proportions ; and fourthly, the country towns where it tends to disappear.<sup>1</sup> Now in many other respects the distinction between London and other big cities is one of degree rather than of kind ; and many of its special difficulties are not so much peculiar to it, as rendered unusually great, because of its exceptional size. The resulting problems, therefore, fall into two classes, first those of a general character which arise out of its industrial conditions, and secondly those tendencies of modern industry which specially affect its methods of industrial training.

First of all London is less of a manufacturing than of a commercial city, whilst as the seat of government it is a great centre of social life. It is likewise the headquarters of much charitable, religious and philanthropic work. Its industries therefore are affected by these requirements. This is one reason why the transport trades are so prominent and why, except in the case of Railway Service, the numbers employed in them are far greater relatively to the population than in other places. Similarly, the proportion of dealers, as shown by the Census Returns, which covers those engaged in shops and retail operations generally, is with one or two exceptions unusually large, as to an even greater extent is that of clerical labour. The influence of the seat of government, society and philanthropy is further seen in the magnitude of three other groups, Building, Woodworking and Clothing, whilst all these characteristics combine to give it a very large proportion of the men engaged in the Printing Trades.

The effect of this distribution is to demand a proportion

<sup>1</sup> Report to the Poor Law Commission by Mr. A. D. Steel-Maitland, M.P., and Miss Rose E. Squire, H. M. Inspector of Factories, on the Relation of Industrial and Sanitary Conditions to Pauperism (Appendix XVI., Col. 46535, 1909).

of low-skilled labour on the one hand, and of clerical workers on the other that is greater than in the country as a whole, whilst that of men engaged in skilled employment is comparatively small. This tendency must not, however, be exaggerated. The Printing Trades in London are exceptionally large, and in few industries is the general level of skill so high. The same is true of the Precious Metal and Instrument Group, though some of these latter have a growing element of juvenile, and unskilled adult, labour, resulting from subdivision and the increased use of machinery. Again, for reasons that will be dealt with later, the large number of high-class retail orders that are found in the Furnishing Industry creates a demand for a very high level of capacity. Still, after making all allowances, the proportion of low-skilled workmen is large; and casual and irregular employment are very prevalent among all grades of labour. This indeed is a phenomenon that appears to be inseparable from the trade of a port and from many kinds of distributive work. For a similar reason juvenile Blind Alleys are unusually common since they require more of it than do the bulk of the manufacturing industries. Hence the problem of London is complicated and made more difficult from the very first by the nature of its demand for labour.

Moreover the special characteristics that result from this industrial character are rendered less capable of treatment by a matter in which no other city can bear comparison with it, and that is its immense size. This accentuates and intensifies every difficulty. Here indeed it differs widely from other capital cities in that their area is more manageable and the distribution of their trades more obvious to their citizens. This fact, therefore, has always to be borne in mind in considering its peculiarities.

The first of these is the comparative rarity of large localized industries. Its trades are extremely varied, in spite of the almost complete absence of several important ones, such as the textiles, and perhaps this is the reason why each of them is usually spread over a wide area. There are

large industries but, with one or two exceptions, they are scattered; and localized industries but they are mostly small. Further the worker's place of business and his home are often afar apart, so that even where the factories and offices are close together, the homes of those who work in them are not.

Large localized industries have considerable advantages, especially where, as in manufacturing towns of moderate size, they provide employment for a considerable part of the population. They give a natural outlet for the labour of the rising generation, which in the Potteries betakes itself to the furnaces, in the Boot Towns to the boot trade and so on. Some go as apprentices and learners to acquire the most skilled operations, others take up boys' work and rise by a sort of natural progression to do more difficult processes later on, and yet others come in time to do as men the unskilled jobs. But in each case the provision of a definite opening is of immense value, even where the future only promises a position of the latter kind. For those who can look for nothing better—as under our present industrial organization is the lot of many—a definite position in life counts for much. With all forms of labour the greatest danger is that of drifting from one thing to another without mastering any, and this a localized industry helps to avert.

Sometimes, indeed, localization may, from its very concentration, increase certain evils, as when the trade employs an excessive amount of boy labour. Within it, again, the organization may be bad, or there may be much casual employment, but all the same openings or at least places do naturally present themselves for far more persons than when it is scattered, and in any case the position of those who enter it is preferable to the endless drifting from job to job that is so common in London.

Generally, therefore, those districts, which possess one or more of such industries, have at least the advantage of providing natural outlets for their young workers. It is very different in London. For such openings are seldom

available in large numbers except in the case of low-skilled labour ; and some of its largest localized trades are those which give little opportunity of employment, or at least of well-paid employment, after adolescence. The great difficulty, however, arises out of the scattered character of those which do give real prospects. In many other towns good openings present themselves ; here in London it is necessary to go out and find them, and they are difficult to find, so that the boy and his parents never really know what is available. Thus, besides the danger of failing to find anything, they are often compelled to accept the first place that offers whether it is suitable or not.

Moreover this difficulty of finding a single thing of a desirable type is accompanied by the presence of too large a number of jobs that are better avoided. There are always plenty of the latter going, and so the tendency for boys to drift, instead of sticking steadily to their posts, is multiplied. The suitable ones are scattered among others that are not, and in the attempt to find the former they either drift into the latter, or, overwhelmed by the difficulty of their task and fearful of missing any chance, snatch at whatever turns up first. Thus the danger that learning will be subordinated to wage-earning, already present in any case, is considerably extended by these causes. Finally, even when a good opening is obtained, prevailing conditions combine with the frequent absence of a formal contract to render it equally easy to leave and offer all sorts of temptations to do so to boys of unsettled disposition.

Moreover even London's few localized industries are hardly fitted to play the same part as those of other towns : but their rarity must not be exaggerated. Sometimes the localization is only partial, as in the case of Engineering along the south bank of the river, or of Ship-repairing in Poplar. The latter contains more than one-third of all male workers in the London Ship-building Trade, and seven riverside boroughs<sup>1</sup> on the south of the Thames employ over

<sup>1</sup> These boroughs are Woolwich, Greenwich, Deptford, Bermondsey, Southwark, Lambeth, Battersea. The Arsenal accounts for a considerable proportion of these in the case of Woolwich.

19,000 men and boys in General Engineering and Machine Making, or nearly half of those returned for the whole of the County of London. Similarly a very large proportion of those in the Printing Trade are found in six boroughs which are more or less grouped about its chief centre in the immediate neighbourhood of Fleet Street, three of them being on the North, and three on the South, side of the river.<sup>1</sup>

Nevertheless the areas over which these men are spread is too wide to allow of any real local concentration, except perhaps round the Arsenal at Woolwich. Such, however, is found, especially if we take into account the size of the trades concerned, in that group of industries which is combined in the Census under the heading of Precious Metals, Jewels, Watches, Instruments and Games. They may be referred to shortly as the Precious Metal and Instrument Trades. Their chief home is in the central and north-central districts of the County of London, and, as sometimes happens, the factories are even more localized than the homes of the men. The whole group was returned at the recent Census as employing just over 23,000 workers<sup>2</sup> in the County of London, and of these not very far short of one-half (about 10,600) came from four boroughs—Finsbury, Islington, Hackney and St. Pancras. Moreover, this localization of the actual manufacturing business is more marked than it appears on paper since in some of these trades a good many men are employed by retail shops and dealers all over London to carry out small orders and repairs. This is particularly true of the clock and watchmakers who are comparatively scattered.

In Silversmithing the four boroughs just mentioned contained almost exactly half of the workers employed in the County area. The largest numbers are found in Islington, though factories and workshops are probably more numerous in Finsbury. There is in the same district a further concentration of art metal workers, who are manipulating the base metals, of whom there is no separate return,

<sup>1</sup> Finsbury, Hackney, Islington, Camberwell, Lambeth, Southwark.

<sup>2</sup> Workers 23,067: Dealers 4,138.

and it contains between one-half and two-fifths of the men in the Scientific Instrument Trades. Finally the Pianoforte Trade is even more narrowly centralized, more than half of those engaged in it being found in Islington and St. Pancras, with a smaller aggregation in Hackney. In some of its branches there appears to be an excess of boy labour.

The Manufacture of Leather, however, has the reputation of being the most concentrated in London. So far as the factories are concerned, the actual making of the leather is very narrowly localized in Bermondsey and those parts of Southwark and Camberwell which are contiguous to it. The trade in this district employs a much larger proportion of the workers than the Census would lead one to suppose, since many of the men, and particularly of the more skilled and better paid, live in other boroughs. Makers of leather goods are less concentrated, but the trade appears to have two chief centres, one to the North of the river in Hackney and Islington, and the other to the South in Southwark and Camberwell. In neither case, however, is the localization at all marked. Saddlers and harness makers are spread fairly evenly over London.

All these trades are comparatively small, but localization is also found in some of the larger industries, notably in Tailoring, Bootmaking and the Furniture Trades. In the two former there is considerable subdivision of labour, and in certain districts Tailoring is associated with the Sweating System. At the recent Census Tailoring employed about 33,000 men and boys in Greater London and Bootmaking about 24,000, and both showed great concentration in certain districts, at least so far as the wholesale trade is concerned. Moreover in them and in the Furniture Trades the homes of the workers are situated to a great extent in the same neighbourhood as their work places. In the Borough of Stepney the number of male persons engaged in Tailoring was over 14,000, and in Central London there was also a smaller but still appreciable concentration. In Bootmaking, there were over 8,000

in four of the East London Boroughs—Stepney, Shoreditch, Bethnal Green and Hackney.

But in some ways the Furniture Trades of East London are the most important of all, more particularly in the same four boroughs which in 1911 contained more than two-fifths of all their members. Taking individual branches, they domiciled something like five-eighths of the cabinet makers (of whom there were 3,752 in Bethnal Green and 2,123 in Shoreditch), nearly one-half of the french polishers and about three-tenths of the upholsterers. The Woodworking Trades as a whole are not a homogeneous group, but these three branches of it do form such a one in East London.<sup>1</sup>

But if so far they are localized, the trades we have been considering have characteristics which prevent or hinder them from performing the services provided by the localized industries of provincial towns. Many of them are small, employing in all only a few thousand workers, and however considerable is the proportion of them working or residing in one district, it is a very small part of the total population. Thus the 2,856 men and boys engaged in the Pianoforte Trade in Islington and St. Pancras are only a drop in the ocean among the 179,000 male workers in these boroughs, especially if we compare them with the 15,715 in the Boot and Shoe Trade at Leicester out of a total of only 71,000. Indeed two or more of our localized industries sometimes exist side by side in the same district. They cannot, therefore, play the same part that those of other towns do in focusing the demand for juvenile labour. Even in the Furniture Trades the same thing holds good to a lesser extent, except perhaps in one or two boroughs.

But further several of these industries suffer from disadvantages which render their influence harmful rather

<sup>1</sup> Taking these boroughs as a whole the Woodworking Trades contain between 9 and 10 per cent. of their occupied male population, but in Bethnal Green and Shoreditch the proportions amount to 19.9 and 16.3 per cent. respectively compared with 22.1 per cent. in the Boot Trade at Leicester.

than beneficial. One or two of them are decaying and thus ceasing to provide as many openings as formerly or even full employment to those who do enter them. The organization of others is often loose, especially in the Furniture and Pianoforte Trades. Sometimes, again, the work is subdivided, more or less minutely, between different firms, and this is also true of parts of the Art Metal Trades. When, therefore, boys enter such firms, they can at most only learn a part of the trade. This may indeed form a stepping-stone to something better, but on the other hand it may give little of permanent value.

Thirdly, and perhaps of more importance, is the fact that the Furniture and Pianoforte Industries are honeycombed with casual labour and have marked seasonal fluctuations. The latter are increasing in intensity in Art Metal work also. This casualization, moreover, extends to the juvenile workers and compels them to drift about from firm to firm, whilst the recurring periods of unemployment are particularly baneful to them. Such movement is also becoming necessary, though not as yet to anything like the same extent, in the Precious Metal and Instrument Group. Finally many of these trades, partly because of their method of production, partly from the instability of their labour supply, have to employ an undue proportion of boy labour: and whilst in some districts or in some firms there is a deficiency of young workers, in those boroughs where they are most localized the excess is often considerable.

The second peculiarity of London springs from the fact that it is to a great and growing extent a centre of repair and retail work rather than of new construction. Where this is so, it possesses an unusually large proportion of firms of small or moderate size, and even when they are large, the business varies greatly in character from job to job, and even on the same job. Thus the huge establishments of other towns are comparatively rare, and instead of the specialization of work that is their characteristic, the demand is mainly, though not entirely, for all-round men. This does not apply to all trades, and House Building is a notable

exception. Where it does, however, a further distinction must be made between repairs and odd jobs generally and new work done in execution of the retail orders of private customers.

The former take several forms. First there is repair work pure and simple, which ranges from very large contracts of Ship-Repairing to a great variety of odd jobs. Secondly there is a class of work which, though nominally new construction, is really of the same character. It consists mostly of small orders for purposes such as replacing breakdowns of machinery and tools, supplying parts and accessories, making slight additions to plant, and so on. Thus big contracts are often carried out elsewhere, but these smaller ones it is often not worth while to send to a distance, especially if they require to be executed quickly. The Printing Trade in Central London, for instance, is served in this way by a certain number of Printers' Engineers. Thirdly many large firms have small shops attached to them with sufficient men to keep their buildings or machinery in good condition, and in the total these also account for a considerable number.

The industries in which these circumstances are most marked are those of Shipbuilding and Engineering. In the former practically no new construction takes place in London, and the men in it and in those branches of engineering that are dependent upon it are almost entirely engaged on repair work. In the other sections of the Engineering Trades the same thing holds good with certain reservations and the men are mainly employed on these kinds of orders. Comparatively little new manufacturing on a large scale is done. With one or two exceptions, the Railway Companies have moved their works away, and other large factories, if found at all, are situated mostly in suburban districts such as Willesden. In South London, however, there is still some large scale production, but even there the general statement as to the character of the industry holds good.

These, however, if the most important, are not the only cases in which such conditions prevail. As already stated,

Clock and Watch Makers are mostly occupied in this way, as are many of the mechanics employed in the Cycle and Motor Trades, and repair work also provides for considerable numbers in the making of clothing and boots and in House Building.

Moreover in London a great deal of new work is carried out retail, especially in those trades that serve the wealthier districts. Of this the best example is found in the Furnishing Industry of the West and North-West. Much of its business is done not for the wholesale market but to the orders of private individuals. Many such are specially designed and executed according to the taste of the purchaser. The work, too, is not only of very high quality, but very varied in character. Even in a large order, therefore, a very extensive use of machinery or of machined parts is not profitable, and the proportion of work that has to be carried out by hand is unusually large. Thus the men employed are highly skilled and highly paid and the boys who are taken on get a thorough training. There is and can be little subdivision of labour, since each contract differs from the previous one and sometimes almost every piece of furniture does so. Other instances of such retail work are found in the higher class of Bespoke Tailoring and Bootmaking. One might also add that even in production for the wholesale market, notably in the Furniture Trade of East London and in the Art Metal group, the number of small firms is very great, but in them the methods of working are different.

Now with regard to Industrial Training these classes of work have many peculiarities. The result is on the whole favourable as regards the actual teaching, but the general conditions of employment are often far from good. Repairs and, to a lesser degree, Retail Orders are apt to come in rushes and at irregular intervals, and in woodwork the latter are frequently seasonal in character. Thus there is irregular and casual employment of boys as well as of men. For this reason they are often compelled to move from firm to firm, and are therefore rendered liable to long spells of unemployment; and this is a far greater evil in their case than in

that of adults. Moreover, small shops sometimes mean small and inferior work, consisting largely of odd jobs, whilst some of the smaller masters are not capable of teaching and, unlike bigger firms, have not in their employ others who are. This, however, only applies to some, and not to all of the shops doing repair and retail business, and irregularity of employment is not nearly so common in the case of those engaged upon high-class retail orders.

On the other hand, the work, especially in shops above a certain size, is necessarily varied, and renders minute subdivision impossible. Where the quality is good, therefore, no better training can be asked for, since the boy must sooner or later be put through the whole business. Moreover he comes into closer and more intimate contact with his employer than he can do in a very big business. The direct personal tie is of great value, and small employers of this type have a special interest in bringing their boys on as rapidly as possible. They, therefore, get at least a very thorough grounding in the elements of their trade.

A third question that is closely allied to that which has just been considered is the opposite tendency to the growth of specialization, which is common to the country as a whole and not peculiar to London. Sometimes it has been carried as far or even further there than elsewhere, at others not nearly so far, whilst in certain cases the very incompleteness of its development has given rise to a special problem. The tendency operates mainly in two directions. It may consist, first, of the subdivision among a number of men in the same firm of processes formerly performed by a single man; and, secondly, it may arise because individual firms have a limited range of output. In other words, the result may be effected by operating either on the process or on the product.

When the term specialization is used without qualification, the first of these alternatives is referred to. The separation of processes, indeed, was coeval with the birth of manufacturing industry, and thus the term really implies the fresh creation of new processes out of the old ones, carried sufficiently far to effect a definite change in the skill

or status of the workman. The doing of a little exceptionally well replaces the doing of a greater amount less perfectly, sometimes with a loss on balance. In the Building Trades, for instance, a man used to be a carpenter and joiner, as in a small shop he still is ; but now, in a large firm, he is either one or the other. So too in big engineering works fitters and turners are two separate classes, and sometimes a third is added—namely, that of erectors. Here, however, and to a lesser extent among wood-working machinists, there is a further specialization of men on to particular machines, each man working one and one only ; and thus a class of machine-minders either replaces or supplements the mechanics. This subdivision, indeed, has been carried so far in the provincial Boot Trade, that many operatives preform only a single small process. Speaking generally, however, the present generation is said to have seen a great growth in this direction, but more probably causes that have been in operation for some years past are now for the first time beginning to have their full effect. Taken as a whole, however, such specialization has neither been carried so far nor adopted so frequently in London as it has in other manufacturing towns.

The effect upon the position of the artisan has varied. Sometimes it has reduced the numbers required, but only to a small extent the skill needed by those who are left. Sometimes, again, it has decreased this or altered its character. Some of the finest machinery used in Engineering, for instance, requires a large number of men whose skill is far less, and a small number to "set up" the machines, whose skill is greater, than that of the older type of mechanic. Or, again, it is common for general intelligence to be developed at the expense of manual dexterity. Thirdly, a fresh class of labour may be introduced to do the work. Women, for instance, have replaced men in parts of the textile trades, and boys, or even girls, work the semi-automatic and other simple machines that are becoming so common, especially in metalwork. Here, therefore, new Blind-Alley Employments are created : and what formerly

lasted a lifetime now ceases on the threshold of manhood.

Specialization, therefore, has three possible results, decreased demand, employment of a lower grade of adult men, and the substitution of female or juvenile workers. Often, however, the displacement of one class of labour is partly offset elsewhere. The " stamping-out " of articles of silverware by boys has limited the demand for silversmiths ; but by cheapening the product, it has provided increased employment for those engaged in soldering together the stamped-out parts. Where, moreover, the change is uniform throughout a trade, the resulting displacement, great though it is, is, after all, temporary, except so far as fresh juvenile employments are created ; and the matter adjusts itself sooner or later. Fresh workers cease to enter the branch affected, and existing ones get absorbed elsewhere or gradually die out. Our present industrial organization does, indeed, involve much temporary hardship, and many skilled workers have no resource left except low-skilled and often casual labour ; but even so the effects of the change, if it is complete, are limited to one generation.

Different conditions prevail where the change is only partial, as is frequently the case in London. There are then two competing forms of production in the same industry, the specialized and the non-specialized, and each of these requires its own labour supply. This in some respects intensifies the evil and renders it more permanent, especially if the number of specializing firms is small, as in London it often is. A man employed in one of them has been taught to do only his particular branch of the trade.<sup>1</sup> Now where specialized production is normal his skill is in general demand, since he can perform a service that every one requires. He is still liable to be thrown out by general trade depression, but not by slackness in a single workshop. When, however, only a few firms require his particular aptitude, there is great danger that he will frequently lose

<sup>1</sup> In the case considered the man in question remains a skilled man with a high level of skill over a narrow range, whilst the bulk of the firms require all-round workmen with a lower level of skill.

his employment through slackness in one or two of them, or even permanently through their failure. He suffers from the very limited market for his skill, and if, as sometimes happens, the trade is one in which the business of individual undertakings continually fluctuates, frequent spells of unemployment are inevitable. Similarly all-round workers have been known to fail to keep employment in certain cases through failure to reach the standard of speed or skill required in a single branch. In London, therefore, the difficulties caused by specialization of processes are largely the result of its incomplete adoption.

The second type of specialization takes the form of subdivision of output or the limitation of the work of a firm to certain articles. It is very common in London. In House Building an increasing number of businesses confine themselves to certain branches; but this is merely the separation of the management of distinct trades that were formerly controlled by a single head, and the worker has still to learn as before the whole of his particular craft. What we are really concerned with is the case of a trade producing a great variety of types and patterns of its product, in which firms specialize on a few of them or even on a single one. In hardware only a certain article will be produced, and in joinery only doors or window-frames, and so on. It is in Cabinet Making, however, that this is most common, especially among the numerous firms of small and moderate size. A master confines himself to cabinets or bedroom suites or cupboards, or even to one or two patterns of them. Thus he is only in the position to teach, and a boy to learn, a part of the business, and how much this will be varies with the character of the article produced. On one he will acquire considerable knowledge of the tools and processes, on another the merest smattering; but in either case his knowledge will be incomplete, and he will have to move to other firms to complete it. A similar subdivision is also common in Silversmithing, the most frequent distinction being between large and small work. Few trades, however, escape

it entirely, and it is far more developed in London than is specialization of processes. Its influence on Industrial Training is often enormous.

The result is an increasing difficulty of learning the whole of a trade in one shop, and the statement that this is impossible is in some cases not far from the truth. Hence migration from firm to firm is often essential, and the same dangers are found as appear in connexion with repair work. The chances of friction and wastage are greatly increased, and many boys, as a result, grow up half-taught, and others suffer far too much from spells of unemployment. These difficulties, indeed, are not insuperable, and could be overcome by suitable organization, but as yet this does not exist. They are, moreover, far more serious in London than they are elsewhere, and the means for overcoming them are still in their infancy.

Together these two forms of specialization have created various dangerous or undesirable forms of Boy Labour. The growth of Blind Alleys, which are simply labouring work, has attracted the most attention. The skill required is that of a labourer, the strength and stamina those of a boy. His commercial value, therefore, is measured by the high boy's wage that is paid for the time being. Less obtrusive, but equally insidious and little less dangerous, are those forms of juvenile employment that I have just been considering. Here parts of the work of a trade are given to boys and young men in every stage of development. Apart from purely unskilled jobs, there are others that require young workers, partially taught and of varying degrees of capacity, for which, in fact, "an improver will do." In short, "boy labour" is supplemented by "improver labour," and this has led instinctively to the grading of work and wages. Each piece of work requires a certain amount of skill and gives knowledge in proportion. So far it is educative. The boy or youth after doing it is one step, but only one step, further on the road towards his goal. Some, therefore, work their way up from job to job, but others do not; and thus many never fully master a trade who yet learn a good deal about it.

Finally, before leaving this subject, two peculiar cases have to be considered. For various reasons the use of improved machinery, and the resulting subdivision of processes, is carried further in House Building than in other London trades. The consequent decrease in the range of skill has, as, for instance, in the case of joiners, been counter-balanced partly by the higher level now required in the performance of the work that is left and partly by the increased difficulty of learning what has still to be learnt. The trade remains highly skilled. The rougher parts of it are now done in the machine shop, and this has caused a demand for finer finish by the joiner. Moreover, what is now done in the machine room comprises just those easier and simpler processes that are most suitable for the younger boys to make a start on. To learn these helps them to master their business thoroughly, and to get a complete knowledge of it the lad should work through it from the beginning. By so doing he obtains a better grasp of its principles. Otherwise he is apt to be at a disadvantage compared with a boy taught in a provincial town or in a smaller shop, where much more has to be done by hand. This difficulty is experienced more or less acutely by all large cities, and partly accounts for the preference shown by contractors for country-trained workpeople.

Secondly, the huge size of London is, among other things, largely responsible for the concentration of different grades and forms of work in different localities. An instance has already been mentioned in the case of Cabinet Making. Here the wholesale trade in East London is much subdivided, and employs much casual labour and an excess of juvenile workers. The smaller industry of West London is mainly retail, needs highly skilled workmen, takes few boys, and, except for somewhat marked seasonal variations, enjoys admirable conditions. Now in their different districts, these two sections are almost two distinct trades, and there is little interchange of labour between them. Hence, owing to their unsuitable training, the surplus boys of the East seldom, if ever, find employment as men in the shops of the West.

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In other trades also there is a similar division. Sometimes it consists entirely of a difference in quality, without the different qualities being located in separate areas ; and here too there is often the same absence of mobility. Thus in Tailoring and Boot-making, most of the higher-grade work is found in West London, but in Art Metal Work all classes of shops are concentrated in the same boroughs. In any case, however, the feature to be noted is that a deficient number of young workers in the better class shops is as a rule filled up, not from other branches of the trade, but by workers trained outside London.

This fact, therefore, forms the last of those peculiarities of London industry that specially affect Industrial Training. It extends far beyond cases of this kind, and it has become a truism to say that London Trades are largely recruited by provincial workmen. This feature again London shares with other large cities, but at the same time it probably draws more of its labour from elsewhere than they do, and draws it from a wider area. This influence will receive separate and fuller treatment later.

Further there is not only an influx but an efflux as well. The influx of labour is supplemented by an efflux of production. Industry, especially manufacturing industry, is tending to leave London, and more particularly its central area. Sometimes a trade, or a part of it, merely moves to the outskirts for the sake of lower rents and rates, sometimes much further afield. Thus Shipbuilding, as opposed to Ship-repairing, has been transferred to the North-East Coast and to the Clyde. In the manufacture of leather, Leeds is growing, on the whole, more rapidly than Bermondsey. Closer home, printing and bookbinding works have been transferred to places like Letchworth, and in districts like Willesden factories of various kinds are being built to replace those that are closed down in the more central areas.

The trouble is accentuated by the fact that when the works are moved, some at least of the workmen whom they employ are left behind, and the loss to Londoners is even more considerable when they are gradually displaced by

provincial competition. Where there is a definite removal, the more energetic and enterprising follow the trade : but in the latter case there is for long no palpable sign of the change. Only the demand for labour grows gradually less and its employment more casual.

Together therefore the influx and the efflux diminish the amount of skilled employment available. The demand for clerical workers and in the transport trades has increased, but it is doubtful if this increase is sufficient compensation ; and there are signs that in London there is some permanent excess of labour.

Such, therefore, are the general industrial peculiarities of London. First, there is little local concentration. Trades, as a rule, are scattered all over it and, even when they are not, are, with one or two exceptions, too small to bear any marked proportion to the total population of an area. Secondly, the amount of repair and retail work is very large, as is the proportion of firms of small or moderate size. The former often combine the dangers of casual employment with unusually good opportunities for learning ; the latter give a good groundwork in the trade, but are frequently limited in the amount and quality of their business. Thirdly, specialization has taken forms that are to some extent peculiar to London. Separation of processes has been only partial and of such a character as to limit certain workers to a very few firms. Subdivision of product or output among different employers has been more common, rendering necessary continual movement from one shop to another if the training is to be adequate. Finally, London employers get a very considerable proportion of their trained labour from elsewhere.

Together these characteristics have had some important effects. The first consists of the irregularity of the conditions under which a trade is learnt. These have already been described, together with the difficulty of finding an opening, and the necessity, in many cases, of frequent change of shop. Further, they have led to a variety of methods of teaching, and at the same time require a peculiarly careful

control of the individual boy and a very strict and well-regulated organization of the labour market. Secondly, there is a deficiency of openings, at any rate for skilled labour. Indeed, the demand for learners not seldom falls far short of the supply. The statement was frequently made to me that "We do not want boys, we want men," and in most cases at least sufficient numbers of the latter were available. Often, too, such demand for boys as exists is for them to do such jobs as will not give them any training for their work as men. Only in the rarest cases is difficulty experienced in securing not merely sufficient learners but as many as are required several times over. Taking all forms of employment together, indeed, opinions vary as to whether in fact there is or is not an excess of juvenile labour ; ( but so far as there is a deficiency, it is confined to unskilled and uneducative occupations.

At this point a short treatment will suffice for the other peculiarities mentioned at the beginning of this chapter—namely, those arising out of the existing methods of training. These have an important mutual influence upon the conditions already considered. Now, stated baldly, the outstanding feature is absence of system. It is not a matter of a good system or a bad one, but in the majority of trades there is a variety of methods, but nothing that can be called a system at all. Each firm, each parent, each boy does what he thinks best, and often does it very well, but not in co-operation with others. The result once more is that the chances of friction and of abuse are enormously magnified, and the evil tendencies of industrial conditions are correspondingly encouraged. Moreover, with a few exceptions, the Trade Unions are seldom able to enforce any definite policy for improving the teaching of learners, and sometimes they have no policy to enforce. Everything, therefore, is left to chance, and the wonder is that abuses are not more prevalent. And as it is with the entry into a trade, so it is after entry. The contract between employer and learner very often does not guarantee teaching, but simply the "opportunity to learn." Frequently

there is not even this. The boy is just employed as a wage-earner and demands his value as such. His chances then will and must depend largely upon himself, for, as stated in an earlier chapter, he is not trained in any scientific sense, but teaches himself or "gets to know."

It is, indeed, inevitable that under modern conditions there should be a variety of methods of teaching trades, since no one device can fit all sorts and conditions of employment. The trouble, therefore, arises out of the absence of co-ordination between them. There is not only variety but mixture of methods; and often two or more of them are found side by side, not merely in the same trade, but even in the same firm. Of apparently similar employers, one will employ only bound apprentices, another only improvers, and a third perhaps will engage both indifferently. The difficulty, therefore, of describing existing methods is increased. Such description implies an actual separation and the existence of separate spheres of influence. There is, in fact, no such thing.

Now this prevalence of chaos, for often it is little less, produces numerous evils. Advantages vary between one method and another, each having its own points of superiority, according to the conditions that happen to prevail. Some, too, have the greater immediate attraction, others more solid and lasting benefits. But when they are found side by side indiscriminately, abuses and misconduct are rendered easier. The absence of any definite standard of teaching assists the unscrupulous employer to exploit his apprentices, and sometimes the phenomenon occurs that bound apprentices are less well treated than boys who are not bound, and certain employers, who fortunately are not numerous, bind them for this very reason.<sup>1</sup> A definite predominating system not only acts as a guide to the great bulk of the masters, but exposes clearly and at once any malpractices of this minority. Similarly the boy who

<sup>1</sup> The obverse of this picture is seen where an employer has gone to trouble and expense to teach a boy who is not bound to him, and then the latter leaves his employer just as his services are becoming valuable.

misbehaves himself is comparatively safe in London, and, if dismissed from one job, has at first little difficulty in finding another. Thus exploitation on the one side, and drifting or slackness on the other, are liable to be greatly increased.

Especially is trouble experienced at the time when a boy first starts to earn wages. The absence of recognized methods and the other difficulties that beset London industry, put an undue premium on those forms of employment that present greatest immediate attraction. This strengthens the tendency that is latent in most boys, and in many parents, to set wage-earning before learning. The difficulty of finding, and getting into, the right occupation is great for the reasons already given; and thus the acceptance of the first thing that offers, good or bad, is felt to be almost a necessity. The preference for high wages over future prospects may not be there to begin with; but under existing conditions it almost necessarily grows up sooner or later and, whilst these remain as they are, will continue to do so.

Thus perhaps the most salient, and certainly the most dangerous, fact of the present day is the mental attitude of boys and their parents towards learning and earning. Here the old position no longer holds good. In the past the boy was regarded essentially as a learner, and both his employment and his wages were conditioned by his position as such. Both he himself, his parents and his employers looked primarily to this. Nowadays the tendency is to put the wage-earner before the learner—sometimes deliberately, sometimes from lack of knowledge, sometimes from failure in the attempt to get a good opening.

Modern industry not seldom demands, indeed, that a lad should be a worker first and foremost and get to know his trade as he works. The employers employ and pay boys according to their commercial value, and boys, or their parents for them, come to demand wages in proportion to this, whilst such a demand on their part may in its turn compel employers to treat them solely as workers. Some-

times the initiative comes from one side, sometimes from the other ; but undeniably, even learners—that is, those who are definitely employed as such—get wages far more nearly in proportion to the value of their work than they used to do ; and thus the power of the employer to teach them is reduced. For, apart from any preference for uneducative labour because of its greater immediate returns, many boys prefer to obtain the highest wages that they can at some branch of a skilled trade and whilst so doing, take their chance of “ getting to know ” it. That is to say, the boy is regarded, and regards himself, as a wage-earner as well as a learner, if not as a wage-earner first and a learner only second.

Thus do many circumstances arising out of its social and industrial peculiarities combine to produce and accentuate the absence of any system of Industrial Training in London at the present day. General conditions, disorder and confusion in the adoption of various methods, and the attitude towards learning and wage-earning, all exercise a bad influence upon training. Dangers and difficulties, that are more than usually serious, are not met by the careful organization that is specially necessary, and full use is not made of such advantages as London undeniably possesses. On the contrary, unfavourable tendencies have been allowed to grow almost unchecked. Everything has been left to chance. Alongside of those who do learn, and many do, there is great loss in the waste or spoiling of much good material, in an altogether disproportionate number of failures, and in the growth of various types of half-taught workmen. Thus has the position of London fallen from one in which it set the ideal standard of Industrial Education to a state that is almost chaos ; and thus too the number of those who from various causes “ graduate into unemployment,” in the expressive phrase of the Minority Report, is unusually and unpleasantly large.

## CHAPTER IV.

### REGULAR SERVICE.

Four Forms of Regular Service—Formal Apprenticeship by Indenture—Where Predominant: The Printing Trades, Bookbinders, The Watermen, Smaller Trades.

Less Formal Service—By Verbal Agreement: On Good Behaviour: Working and Learning—Conditions under which this last exists—Predominance of Verbal Agreements: Engineering—Presence of small amount of Migration—Its Causes—Difference in this respect between Formal and Informal Service.

The Third Form of Service or the Third and Fourth combined—Optical and Scientific Instruments—Continuity of Employment during Learning—Existence of a class of Semi-skilled Workmen—Silversmithing and the Art Metal Trades—Less marked Prevalence of Service—Considerable Minority learns by Migration—Objection of many firms to Formal Apprenticeship—Methods substituted for it.

Position of Service in Industries where it is not Predominant—Its Adoption by individual firms may be due to chance or caused by definite reasons—Higher Class Firms utilize when the rest do not—The Building Trades: Service more frequent in certain branches—Best firms take fewest boys—Illustration of the Position in the case of the Joiners—Objections to Formal Apprenticeship—General Existence of Migration—Other Branches: Carpenters, Plumbers, Plasterers, Masons, Bricklayers, Painters—Contrast between Building and Printing—Typical Character of the Former.

Relation of Service to other methods where they are in competition—Service and Migration—Service and Following-Up—Service and Picking-Up—Partial Survival almost everywhere of Regular Service and even of Apprenticeship—Differences of Method due to: (1) Locality, (2) Quality, (3) Demarcation of Hand and Machine Work, (4) Adoption of Apprenticeship for Special Reasons.

Firms continuing Apprenticeship where it is no longer usual—Large Well-organized Firms: Building—Highly-Specialized Firms: Silverware—The Good Small Firm—The Premium Hunter—Influence or Interest—Character of these as Teachers.

Growth of Short Service followed by Migration: Its Value—Where adopted—Apprenticeship direct to the men—Instances

of Survival—Summary and Conclusion—The Need for Regular Service.

EXISTING methods of entering a trade in London fall roughly into four classes. The first is that in which it is acquired by Regular Service, involving permanence in the engagement under which a boy learns. It takes a variety of forms, namely: Formal Apprenticeship by Indenture, an Informal or Verbal Agreement (not legally binding), Employment during Good Behaviour (with usually a tacit understanding between the parties), and Working and Learning. In this last a boy gets a job to do a certain piece of work for a certain wage, and then gradually picks up the trade bit by bit, staying on in the same firm until he has done so; but at no time is there any sort of agreement on its part to teach him anything.

Between these types of Regular Service, therefore, there are many differences, but they have sufficient common essentials to form a single class. For the matter of primary importance is that under any one of them the boy is learning from beginning to end by continuous and regular employment in a single firm, though with Working and Learning, and as a rule with Employment during Good Behaviour, this is a matter of fact and not of agreement. But it is in the fact of permanence in one case and of lack of permanence in the other that the vital distinction lies between this and the second class—Learning by Migration.

The treatment of Regular Service, however, may best commence with the consideration of Formal Apprenticeship. The "mixture of methods" described in the last chapter has created confusion in the meaning of this term, but at present it is only with its narrower sense—formal bound Apprenticeship—that we are concerned. This still survives in nearly every trade, though sometimes only to a very small extent, and in a few it remains predominant.

In one important group, the Printing Trades, it is almost universal: and in their largest branch the Compositors' Society enforces strictly and successfully a rule of seven years' service under Indenture, thus confining entrance into

the business and admission into the Society to those who have fulfilled this condition.<sup>1</sup> Though the provincial Unions appear to have been far less successful in this respect, exceptions to the rule in London are unusual, apart from those who have come there after serving their time elsewhere. A few small firms bind for five years instead of seven, and "compositors' improvers" are not unknown, since small offices which do some very simple work, will teach their boys just enough for their purpose, and if they are to learn more they will have to move on. Some of them can do a little machine work as well as a little compositing, but it is doubtful if they ever become competent men. They are, moreover, neither a large nor a growing body. The success of the system is further evidenced by the general testimony to the decrease of abuses and of failures to teach. Partly this is due to strict Trade Union organization, but partly also to the enforcement of a single definite system.

Similar rules are also insisted upon, if not always so strictly, in the other branches. The small but growing trade of electrotypers and stereotypers has a strong Trade Union, and has been very successful in this matter. Both masters and men may and do disagree as to the details, but they accept the principle of Apprenticeship and recognize the need for restricting entry into the business to qualified men. Indentures are also usual in the small subsidiary process of Music Engraving. With warehousemen and cutters, on the other hand, methods are less regular, since the employment ranks as a semi-skilled one. In individual cases,

<sup>1</sup> This refers only to those who are actually put to the Trade in London itself. The Society has not been able to exercise the same control over those who have learnt it elsewhere and afterwards come into London. Its rules, indeed, admit any one to membership who can actually obtain employment in a "fair house" in London. Hence a good portion of the provincial workmen appear not to have received a regular apprenticeship. On the other hand, it has been very successful in compelling nearly all who enter it in London to undergo a full seven years' service by Indenture; and appears recently to have regulated more strictly the admission of provincial workmen with a view to excluding those who have not received an adequate training. In insisting upon Apprenticeship, the Union has had the support of the great bulk of the employers.

however, they are being regularized. Finally, with machine-managers and lithographers Apprenticeship is the general rule, and is gaining rather than losing ground, though the latter are 'not quite so successful in enforcing it as are the other branches of their craft. It should be added that in some cases the influence of the Compositors and the advantages of adopting an uniform system in all the departments of a business has sometimes assisted the other Unions to establish or extend it.<sup>1</sup>

The machine managers insist strictly, and as a rule successfully, on Apprenticeship, in spite of the fact that they labour under the special disadvantage, that alternative methods of entering their trade are more feasible than with the compositors. Both the platen hands and the machine-managers' assistants (printers' labourers) could, if left free to do so, work their way up to the superior position, getting first on to an easy machine and then on to more difficult ones. Cases of this sort have occurred: but the extension of the practice has been checked. If such men, therefore, are now to become managers, they must serve their time in the regular way: and bindings up to the age of twenty years are definitely recognized by the Union, so that youths of ability shall not be prevented from rising. In one instance that was brought to my notice, an overseer discovered such capacity in the man who eventually became his assistant overseer, but to enable him to learn the business he had to get him apprenticed. That this alternative process is a reality in the case of machine-managers is evidenced by the fact that even some Trade Unionists admit its possibility. Nevertheless, the Society has on the whole insisted successfully on the more regular method.

Moreover learning, without a definite bond of some sort, is not only rare, but is becoming more so; and there

<sup>1</sup> It is worth noting, however, that in this trade some firms will be Society Offices for some branches and non-Society for others. Not unfrequently they will recognize the conditions of the Compositors' Union, but not those of the others.

is even a tendency to displace less regular methods by a modified form of apprenticeship. For instance, one employer who brought up his compositors in the ordinary way, used to adopt the following practice for his machine-managers.

“ Formerly there used to be a good many who started as errand boys and progressed from that to be platen hands and so on. This method we ourselves preferred, but have abandoned it for a modified system under which our errand boys become platen hands as before, and after they have worked for us for about seven years we apprentice them as machine-managers and date their indentures back four years.”

The custom of dating back indentures, indeed, is common throughout the printing trades, and a fair number are so bound after working for a year or two as errand boys.

Again with the lithographers, a large proportion of the members of their Unions appear to have served a formal Apprenticeship and the majority of the remainder under an informal agreement. In the larger houses which do both letterpress work and lithography, the former is adopted as in other branches, either for the sake of uniformity, or as a result of the influences of the Compositors' Union. Other offices, however, show more tendency to abandon it, especially in the case of the smaller ones. Taking the trade as a whole, however, there is an appreciable amount of casual learning or picking-up, as some employers put the smarter of their “ laying-on ” boys on to a simple machine, and, if they prove competent, gradually teach them the business. The actual length of service, again, varies with the lithographer from five to seven years, the latter being insisted upon in theory, the former frequently accepted in practice.

Finally, the allied trade of Bookbinding occupies a peculiar position. Machine-binding, which carries out practically all the wholesale work, consists of a number of semi-skilled processes in which the necessary knowledge is too quickly acquired for a long Apprenticeship to be necessary or even desirable. It is required, however, in hand-book-

binding, especially in the best class of it in which a very high level of skill is demanded. Thus, in leather-binding seven years' Apprenticeship is frequently insisted upon, whilst in the less skilled jobbing work five years is usual : and enforcement appears to be strict where high-class bookbinding is carried on as a department of a printing office. Elsewhere less regular methods exist, though the Bookbinders' Society exercises a considerable, if not a complete, control. Indeed, except where machine production has been developed, Regular Service and even formal Apprenticeship have very largely survived.

The Printing Trades are the only large group throughout which the stricter system is definitely enforced : but formal Apprenticeship is also insisted upon in a number of smaller trades. Of these the most important example is provided by the Lightermen and Watermen of the River Thames. Among them the old methods that have prevailed from the early days of the Watermen's Company still continue in force, though there are a certain number of openings through which unapprenticed labour can enter the business, Boys are bound to a Freeman of the Company, and at the close of their servitude receive the freedom themselves. The period of Apprenticeship varies from five to seven years, according to the age at which a lad is bound, the average age of binding being about sixteen. After two years the Apprentice undergoes an examination before the Court of the Company, and if he passes it satisfactorily, is allowed to have full charge of craft under his master's supervision. The occupation is largely hereditary, and many boys are bound to their own parents.<sup>1</sup>

Again London is an important centre of the industry of Brushmaking. In this a certain number of processes, notably "boring," have been taken over almost entirely by machines worked by juvenile labour : but in the others

<sup>1</sup> For fuller details, see Booth, *Life and Labour of the People in London*, vol. vii., Part iv., Ch. v., p. 373. He reckoned that at this time (1892) over 80 per cent. of the Apprentices were sons of those engaged in the work.

the Society houses enforce binding for a definite period. These include nearly all the large firms and some of the smaller ones : and the practice is upheld by the employers. Apprenticeship lasts for five years in the general trade with a shorter period in exceptional cases, and for seven in the making of paint-brushes. It is the only recognized system where Trade Union conditions prevail : but in non-society shops no definite method is adopted, and it is said that the lads in them seldom become fully competent. Similarly seven years under Indenture is vigorously advocated by the journeymen's society in Leather Currying, and seems to be general, though not universal. In Engineers' Pattern-Making and in Diamond Mounting there is either an indenture or an informal agreement, but it is difficult to say which is the more common.

Another trade in which Apprenticeship is still usual is that of Saddlery and Harness-Making, but owing to the substitution of motor for horse traction, very few learners are being taken at present. The trade has several branches—the large Retail Saddlers, the Piece-Masters who work for them, the Wholesale Houses, and the small jobbing shops. Much of the work, especially that done by the two former, is very fine, and involves great care and skill, since heavy loss will often follow from an unskilful treatment of the leather. In each of these branches the learners are bound. When trade was more flourishing, and larger numbers of boys were taken, the teaching was mainly in the hands of the Piece-Masters. A few boys refuse to accept the conditions of Apprenticeship, and there is a certain amount of migration in the wholesale trade. Otherwise, the character of the trade requires the former, and those who have not served their time have a difficulty in obtaining work in the better houses. Indeed the training and remuneration they afford would give Saddlery and Harness-Making many advantages, were it not for the existing check to their development. Similarly the small masters in Watchmaking employ few boys, but usually bind such as they have.

If, however, apart from Printing and the Waterman's

Society, Apprenticeship only predominates in a few small or stagnant trades, this does not set the limit to its influence. Except where an industry has been revolutionized by machinery or subdivision of labour, it will be found to exist in a part, if only in a small part, of every skilled craft. But before dealing with this, we may first consider the trades in which, and the extent to which, the less formal types of Regular Service prevail. Between the three of them a clear distinction is frequently impossible in individual cases ; and many firms give the reality of Apprenticeship, whilst they refuse the form. Owing to the trouble an indentured apprentice may cause, they refuse to bind themselves to teach and keep in reserve the valuable right of dismissal. In reality they do train their boys as well as if there were a formal agreement, and hence that which appears on the surface to be merely a wage contract—the engagement of a boy to do so much work for so much pay—gives in practice all that the more formal system does. The character of this informal service varies in different trades. In some the verbal agreement is as predominant as is the indenture in Printing : and in others Employment during Good Behaviour or the gradual promotion of errand boys is the usual method.

The least formal of all has been described as “ Working and Learning,” where the employment of a boy during his training is actually regular without the existence of any sort of agreement. It is often very common where, as in the Building Trades, Regular Service is not predominant. This is further confirmed by the fact that some only of the boys who start in this way stay on to learn a trade. In some cases, indeed, most of them get the chance of promotion as in that of the glue boys in joinery works : but in others only a small proportion do so. Thus, employment in sawmills is to some extent a Partial Blind-Alley. Moreover, some of those who stay in these and other occupations have to move from firm to firm in order to learn, and do not work regularly in a single place throughout. Hence chance may largely determine whether the trade

is acquired by Working and Learning or by Migration.

Considering in detail the other types of Service, we find the strictly interpreted Verbal Agreement to be predominant in the Engineering Trades, and in some of the smaller industries attached to them. This is specially true of the processes of Fitting and Turning, to which in its narrowest sense the word Engineering is applied.<sup>1</sup> In them there has been some development of subdivision of labour, and of a class of semi-skilled machine-men for whom the Amalgamated Society of Engineers has made special rules and arrangement: but owing to its industrial character this class is not very large in London. Again, the tendency of the bigger firms to separate Fitting and Turning has produced a concentration without a reduction of skill, since apart from this most of them still require all-round workmen, and over a very large proportion of the trade men are needed who can do both.

London Engineering Shops may be divided into those of the Ship-Repairing Firms, those engaged upon new construction, those occupied with repairs and small orders, and those attached to other factories or businesses to keep the machinery in order. The second class is found mainly in the Outer Suburbs, and to a lesser degree in South London, and from it comes most of the demand for the more highly-specialized hands. Neither the third nor the fourth is, as a rule, on a sufficiently large scale to employ men solely as fitters or turners, and even in the more extensive Ship-Repairing Establishments, they have often to turn and prepare their work first in the shop, and then to go out on to the ship to fit it.

To train men for their work, therefore, these three branches need some form of Regular Service for a considerable period, and this demand on their part is reinforced by the Board

<sup>1</sup> When the Engineers' Shop is spoken of, it generally means that in which the Erecting, Fitting and Turning are done, as opposed to the Smiths' Shop, the Founders' Shop, the Boiler Shop, and so on. In Greater London this is the largest homogeneous group in the Engineering and Metal Trades, containing over 16,000 workers as against about 13,000 smiths and strikers.

of Trade's requirements for the granting of a Sea-going Engineer's Certificate. Formal Apprenticeship is not uncommon: but the informal Verbal Agreement predominates. Under this the power of dismissal is retained in the last resort by the firm and that of leaving by the boy: but it is clearly understood that neither shall be exercised except when there is misconduct of some sort. Sometimes there is no actual agreement whatever, but the boys are taken on with the intention of employing them under similar conditions. One firm, for instance, which refused any definite responsibility, paid its boys according to a fixed scale of wages and trained nearly all of them. In Ship-repairing, indeed, a clearly understood Verbal Agreement is the rule, though one at least of the most important establishments adopts a seven years' indenture. Five years, however, is the usual period of service. The small masters follow much the same course. One of them said that formal Apprenticeship was dying out, but that their boys were carefully selected and treated much as apprentices used to be.

Again in these sections of the trade employers are not favourably disposed towards improvers of the type who learn by moving from firm to firm. Some often declare themselves to be unable to find room for them, others regard them as unsuitable or incompetent, and in other cases they will only engage them during periods of pressure. In the Shipbuilding Districts, indeed, such Migration is even less common than elsewhere, and a boy usually serves at least three years in one place first, whilst in some other parts of the trade the practice of apprenticing for less than the full period is on the increase. Still improvers of this type do exist, though their numbers are comparatively small and they are not always known by this name. Thus it has been said of them: "They get a job to work at a certain wage, and are not supposed to be taught, but they do get taught just the same."

Improvers are of a variety of types which will be more fully described in the next chapter. Some are complet-

ing their education after serving an Apprenticeship. In Engineering and elsewhere, the existence of Verbal Agreements does, to some extent, increase their numbers, either by enabling the more restless to move about or the less scrupulous employers to put them off during slackness. Others, again, are cast adrift through the failure or bankruptcy of their masters, and some will lose their places through lack of ability or industry, who could not thus be got rid of if bound by an indenture. There must, indeed, be a fringe of such lads in almost any large trade, and in Engineering their position is usually due to accident or misconduct.

It is only in certain sections of it that Migration even approaches the position of a definite rival method of learning, namely, where there is found subdivision either of processes or output. The former tends to produce men who are only skilled in working one or two machines, and the experience of some smaller employers is that the improvers who apply to them are the abler of those machine-men, who seek in this way to better their position. Subdivision of product, again, especially with the lighter electrical machinery, tends also to produce what from the employer's point of view is a type of work "specially suited to improvers." It forms therefore an intermediate state between that of the beginner and that of the competent workman, and carries the learner a further stage on his journey. If, however, he is to complete it, he will probably have to move to other firms and so gradually perfect himself.

Finally, the trade does provide openings, or rather chances, for an able boy to work his way up after starting in an inferior position. Small firms, and the small repairing shops attached to large factories, usually employ a lad to make himself generally useful to the men. The work, being chiefly repairs, is necessarily very varied, and the boy, from seeing it at close quarters, can hardly fail to learn sufficient to get a start, after which he can work his way up elsewhere. Not all who are so situated will make use of the opportunity, but only the smarter ones. Still under

the Informal Agreement there is always left a loophole through which the latter can enter the trade ; and so far the position in Engineering differs from that found under formal Apprenticeship in Printing. Both methods have their advantages, but in any improved organization of Industrial Training some such opportunities of rising will have to be provided for those capable children who, from poverty or otherwise, have started in a lowly position. The Printing Trade itself, for instance, meets the need to some extent by the dating back of indentures in the case of lads who first came into an office to work as errand boys.

From all that has been said, therefore, it follows that whilst the Verbal Agreement can be very markedly the predominant method of teaching, it cannot be so universally enforced as a Formal Apprenticeship sometimes is ; and the position of the Improver in Engineering has been dealt with at some length in order to illustrate the fact that without a binding indenture a certain small amount of Migration is more or less inevitable. Of the other branches of the Engineering and Metal Industry, Smithing and Boiler-making adopt what I have called Following-Up. Otherwise the conditions are very similar to those just described. In London two of the largest of these trades are Tinsmithing and Iron and Brass Founding. In the former some form of Regular Service, but not, as a rule, Apprenticeship, is almost universal, except where the use of machinery has caused the abandonment of the old method of working ; and in practice regular employment is nearly always given during training. On the whole the same thing holds good in the case of Founding, though Migration is somewhat more common. Brass Finishing also is mainly taught by Regular Service and often under a Formal Apprenticeship, and the work in London has not been taken over by unskilled juvenile labour to the same extent as it has in some other centres. Finally, some agreement, formal or verbal, is usual with Patternmakers and Coppersmiths, whose methods of teaching are stricter and more regular than those of many others. It should be added, however, that owing to the

peculiar character of London Industry, its methods cannot always be regarded as typical of other places.

Regular Service also continues to hold its ground in the Making of Optical and Scientific Instruments, in the Precious Metal Trades and in Art Metal Work. The two latter, for a variety of reasons, show a greater proportion of Learning by Migration than does the former; but all these crafts are noteworthy for the general adoption of Regular Service without the assistance of a definite agreement of any kind, formal or otherwise. Their boys are employed either "during good behaviour" or under even less definite conditions. Nevertheless they do as a rule learn their business throughout in a single firm.

The manufacture of Optical and Scientific Instruments has two main branches—Lens Making and Instrument Making—in which the journeymen are known as glass and metal workers respectively. The latter again are divided into Framers and Turners, who correspond to the Engineers' Fitters and Turners, though the work of instrument-making is by many regarded as of somewhat finer quality. In the Spectacle Trade, again, there is a distinction between workers on white metal and on gold, and among the glass workers there is a special class of jobbing hands, who, when necessary, put an extra surface on the lens. Machinery is being used to an increasing extent in the commoner lines of glass, and especially on cheap spectacles; but the finer grades are still done entirely by hand. In metal work the influence of machinery is less felt. Its amount varies little from firm to firm, and so a man is not in danger of being placed at a disadvantage if he has to seek employment in a new shop.

These trades combine a very high degree of skill with a rather marked subdivision of labour between the different classes of goods which they produce. These vary from cheap spectacles to the largest telescopes and surveying instruments. In a sense, therefore, the making of each of them is a separate branch in itself and frequently a man will not make nor try to make any other than his own. The work is fine and delicate and requires a very high level of

skill and this makes it difficult to take up more than one branch. Thus the teaching is necessarily narrow, but, though narrow, it is also very thorough, and as a result these trades lend themselves to a regular form of service, without the support either of a legal binding or a definite agreement. The same cause also operates to check casual migration from firm to firm, except where a boy has already spent at least three years in a single place. Apart from this there are only a few exceptions, caused chiefly by gross failure to teach during service.

Both Formal Apprenticeship and the payment of a premium have practically died out. One large firm said: "We have a few indentured apprentices; but we prefer to take on common boys, starting them as errand boys and teaching them for ourselves." These latter it employed "during good behaviour," but seldom or never exercised its power to dismiss them. In another case there were two classes of boys, apprentices and learners, and in this way they are still classified by some people. Only a few firms, however, continue to take the former. "Practically speaking," I was told, "there is no bound Apprenticeship, partly because a few persons pay premiums of £50 or £60 with a view to entering the trade as employers, and there would therefore be a difficulty in apprenticing the others." Its disuse, however, was also attributed to the difficulty of getting premiums or of inducing boys to work without wages. "The usual policy," it was said, "is to take what you can get and if a £50 premium is forthcoming it is taken, if not a boy is employed at a nominal wage, and failing that as an errand boy at 5s. a week." The latter is the normal method; and its results are classed as on the whole "pretty fair," but are sometimes held to be inferior to those likely to be produced by the more formal system. A good deal of opinion, moreover, favours the possibility of reviving the latter.

As it is boys are usually taught in one of two ways. They may start as "learners," either with a verbal agreement, or even more frequently with a tacit understanding, to the

effect that they shall get certain wages and, provided that they give satisfaction, regular employment and teaching. The employer can dismiss them and they in turn will stay only so long as they are decently treated. This is "employment during good behaviour," and neither side is legally bound to the other.

Secondly, many are taken on in the first place as errand boys, and then, if they are smart, get to the bench and gradually pick up the trade. To begin they run errands, sweep up the shop and in their spare time do simple manual work.<sup>1</sup> Then, when things are slack, two or three of the men teach them a little in order to make them useful and they progress in this way. This method is adopted by some of the larger firms but is most common among the small employers of good reputation. The latter sometimes refuse to take any direct responsibility, but give such excellent chances of learning that employment with them is very much sought after.

Its continuity in either case is hardly questioned. Early on, by a rough and ready selection, those who are obviously unsuited to the trade are got rid of, but otherwise the employer's right of dismissal is seldom exercised, and then only for incompetence or misconduct. Nominally retention or dismissal could sometimes be determined either by the state of trade or by the boys' own behaviour. In reality everything depends upon the latter, and if it is satisfactory the firm contrives to keep them on. In any case they are less likely to be put off when trade is slack than the men are, since within limits errand boys are always needed. The chief complaint is that they are kept for a long time on one sort of work only. But if they look after themselves, and if they insist on being put to better jobs, decent employers will probably give it to them, or, as it was once expressed, "If they are kind." If it is refused, migration to another firm may take place.

<sup>1</sup> Conditions in the manufacture of leather goods are often very similar to this; but in them a regular division of the time will sometimes be made by which the boys will do the errands in the morning and work at the bench in the afternoon.

There is, however, one important exception. In some cases, those who have started at 5s. or 6s. a week quickly become expert at certain processes, such as "roughing up" the glass and soon earn full piece-rates at them. This is semi-skilled work, but a quick worker can make good money and some are content to remain at it. Again, the semi-skilled machine-workers are somewhat better off than in Engineering. Their work, being done in smallish quantities, is far more varied, and they have to set their own machines; and so they get better wages. Moreover, some of these men, both in glass and metal work, succeed in rising. First they move to other shops in which most of the work is similar to their own, but other sorts are done as well, and, then, in lens work, to the "prescription" shops to which retailers send their orders to be made up. Here they get jobs of every kind and eventually become fully trained mechanics.

The Art Metal Trades are composed of a number of separate crafts, among which is one large and important one, that of Gold and Silversmiths. The others are small and include Silver Spinners, Diamond Setters and Mounters, Die-Sinkers, Engravers, Block and Tool Cutters, Metal, Coin, and Ring Makers, Chasers, and Enamellers. Here the predominance of Regular Service, especially in Silversmithing and Chasing, is not so marked. The cheaper work often forms a Blind-Alley employment for juvenile labour. Specialization by individual firms on particular articles sometimes necessitates migration; and on both sides the abuses fostered by the absence of a binding agreement are not limited to the same extent by the delicate character of the work as they are in Instrument Making. Thus certain firms will lead a boy to understand that they will teach him, and then turn him adrift when he is about eighteen. On the other hand, some boys for the sake of rather better wages will leave an employer who has incurred trouble and expense in teaching them. Normally, however, any understanding, however indefinite, is loyally observed, both by masters and learners.

The amount of Migration, therefore, is decidedly greater than in Engineering or Instrument Making, but nevertheless Service remains the predominant method. Unfortunately, Formal Apprenticeship is most likely to be found in those shops which are least likely to be able to train boys thoroughly. First, there are the very large firms, with an extensive subdivision of processes, whose organization requires that the learners shall make themselves very highly skilled indeed at one part of the trade only. At the other end of the scale, the very small concerns contain an undue proportion of premium-hunters or of men who lack the capacity to teach properly.

The majority of firms, however, refuse to bind themselves formally. This applies more particularly to those of moderate size which are often best fitted to train boys. Their work is at least fairly good. It is largely done by hand, though the use of the spinning lathe is increasing. It is as varied as the prevailing specialization of output will allow, and with them this last is not carried so far as it is in the very small firms. They, therefore, give the best teaching, but, though all the conditions are otherwise favourable, take few bound apprentices. Arrangements are much the same as in instrument work. Either a lad is employed as a learner "on good behaviour" with an agreed scale of wages; or he goes as an errand boy for a year or so, working at the bench in his odd moments, and gradually coming to spend all his time there, till after about two years another is taken on to do the errands. Probably on the average the former gets the best teaching; but the latter is also well looked after as a rule, though his progress is necessarily slower. In either case, his chances will depend largely on himself. If he is civil and obliging and industrious, he will get helped and pushed on. If he is not, he is likely to be kept back. By the employers, again, the disadvantages arising from these methods are often found to be less than those which accompany Indentured Apprenticeship; but it cannot be denied that if they escape some of the latter, they produce other defects of their own. This matter will be more fully considered in a later chapter.

To sum up, therefore, the trades in which some form or other of Regular Service is predominant, cover no inconsiderable part of the field. Indentured Apprenticeship prevails in Printing, the Verbal Agreement in most of the Engineering and allied trades, Employment "during Good Behaviour," or Working and Learning in Optical and Scientific Instrument Work and in the Art Metal Group. Moreover, even where Regular Service does not embrace the whole of an industry, individual trades in it, like Upholstery, still adopt it to a considerable extent, whilst Service by "Working and Learning" is found in a considerable minority of cases even where Migration is most common.

In short, there are few trades from which it has entirely disappeared. Usually a minority of firms bring up their boys in this way, and with them informal service is more frequent than formal. Often no definite rule is observed. Shops of similar size and character adopt different methods, or again a single firm may be teaching its boys in a variety of ways. Special reasons will account for the occasional presence of indentures. The sons of foremen and old hands, friends' sons or relatives, or boys introduced by those with whom the employer does business, get specially favourable terms, whilst others have to work their way up as best they can or are taken on to do certain work and discharged at its close. Hence the impression given is often one of complete chaos; but on closer inspection, the better-class firms usually show some sort of regularity in their policy.

Of this state of affairs an excellent example is afforded by the Building Trades, where Regular Service has to contest the ground, not only with other methods, but with a very larger influx of provincially trained work-people. Here and in the Woodworking Trades, the shops which teach their boys under the best conditions are usually those that recruit the largest proportion of their labour from outside London. Nevertheless many of the smaller firms give at least a very good grounding in the trade, and often get considerable variety of work, whilst subdivision of processes and the use of machinery affect to some extent

the advantages possessed by the bigger ones. Indeed, it is sometimes suggested that boys should first learn what the small shop can teach and only proceed later to work in the larger ones. Nevertheless, it is unfortunate that some and often the best of the latter can take so few of them.

Here one or two special matters require notice. In these trades, a certain—though fortunately not a numerous—class of employers utilizes Formal Apprenticeship as a means of obtaining a supply of cheap boy labour, and this practice is most likely to occur in those cases in which its survival is only casual. Secondly, Regular Service of some sort is more usual in some sections of the group than in others. With joiners a growing dislike of bound apprentices is accompanied by considerable readiness to take boys “on good behaviour”; and my own experience has been that joiners’ apprentices are taken by some firms who have given up doing so in other branches. Indentures, however, are found most frequently among the plumbers in conjunction with the method of “Following-up.” Thirdly, the bigger firms of good class form usually within each trade a small group that insists upon Regular Service. Existing conditions do not enable them to teach many boys—at least with profit to themselves—but their organization does not lend itself to a haphazard influx of improvers and other partially trained workmen. They will sometimes take turn-overs, that is to say, boys cast adrift by the failure or dissolution of other businesses, or young men who have served their time elsewhere and are completing their education, but seldom or never the ordinary migratory improver.

This latter point may be illustrated by reference to the practice of certain well-known firms with whom I came in contact during my investigations. In the cases quoted, the information dealt with the Joiners’ Shop, except in the first, third and fourth, where the answers covered all the branches of the trade.

- I. No boys taken.
- II. Bound Apprentices with premium. Improvers

only in the case of turnovers or Apprentices out of their time.

- III. Apprentices bound and unbound, but the former are apparently being replaced by the latter. Improvers much as with Firm No. II.
- IV. Boys taken on Probation for two years and then drafted into the Joiners' Shop as unbound Apprentices.<sup>1</sup>
- V. Shop-boys, if capable, promoted to the bench and employed "during good behaviour." Some improvers. The Foreman stated that in their own interest boys ought after three or four years to move into another firm.
- VI. Bound Apprentices with Premium, and Improvers. The latter, though liable to be put off, are seldom dismissed in practice.
- VII. Bound Apprentices, with power of dismissal retained, by a clause in the Indenture, in the case of misconduct.
- VIII. Sons of men working for the firm taken on and employed with their fathers "on good behaviour." The Foreman said he could get plenty of improvers, but would not have them.
- IX. Bound Apprentices, sometimes with a Premium. Foreman opposed to taking Improvers.
- X. Have been accustomed to take Apprentices, but are giving it up. No Improvers.

Thus among the bigger firms the alternative seems to be between employing boys under regular conditions or not at all, and the sons or relatives of the workmen frequently get the preference for available places, but do not always utilize it. The cases quoted, however, do not represent fairly the growing tendency to substitute informal for formal contracts. An instance was recently brought to my notice where an attempt was made to apprentice two boys as

<sup>1</sup> This method is also applied throughout the business, the boy after his two years' probation going to whichever branch he appears to be best suited for.

joiners. Ten firms were approached and of these nine stated that they had ceased to bind boys by indenture, finding them to be too much trouble, and the tenth replied that places were reserved for sons of their own men, of whom they had some already on their books awaiting an opening. In addition to the larger firms, however, shops of all kinds take an occasional apprentice, some as a regular thing, others to oblige an employé or a friend, or because they fancy a boy: whilst some of the smaller ones, who are ready to do this on payment of a small premium, give an admirable return for the money.

Nevertheless, throughout the trade as a whole, migratory improvers are common, some being London boys and others young men from outside, who are perfecting their education. The latter will be dealt with later. As to the frequent existence of the former, the Foreman in Firm IV stated that some of the boys apprenticed after probation left them to get better wages, as improvers, and then found they were not as good as they thought they were. Another foreman (Firm VI) said he could get plenty of them if he wished, which he did not, and a third objected to employing them because this meant that they picked up their trade "as it were in the gutter." Again a young South London journeyman said that the common method was "to start as a glueboy and work up as best you can in one or more shops," and a prominent Trade Unionist that there was "a lot of swapping shops and foremen." The Labour Exchange applications from employers also show a demand for both carpenters' and joiners' improvers, especially the former, and the head of an important Trade School divided the boys there into three classes—bound apprentices, learners with a verbal agreement, and improvers.

In the larger firms carpenters and joiners form two distinct classes, but the smaller ones, on the contrary, continue to employ all-round men who do the work of both. This is one of the reasons for preferring them to the larger ones, because in them lads have not only to prepare a job in the shop, but to go out and fix it on the building afterwards,

and thus get an all-round knowledge before specializing on either branch. In the larger concerns, however, they usually grow up either carpenters or joiners, and the attempt to give them a knowledge of both is sometimes frustrated by their refusal to leave the comforts of the joiner's shop and go out on the building. Carpentering is much the rougher job and on the whole requires less skill and more strength, and as a result the teaching of it is less regular. Boys are taken on to make themselves generally useful and take their chance of picking it up as best they can.

It is in Plumbing, however, that the need for a definite and clearly defined system of teaching has been most fully realized, and much attention has been paid to it, both by the Plumbers' Company and by the Operative Plumbers' Society, their efforts being directed largely to the revival of Apprenticeship. Whether a lad is apprenticed or not, indeed, he acquires his knowledge by the process known as "following-up." He must work for a considerable period as mate to a journeyman,<sup>1</sup> learning all about the trade in this way, till the time comes when he "gets hold of the tools" for himself. The apprentice usually does this in the latter part of his time, other lads obtain work as improvers after a few years as mates, and the way they are actually taught is much the same whatever the form of engagement under which they learn. Those who work under a legal or verbal agreement are probably in a minority.

In Plastering, the disappearance of the hawk boy, who served the men with material and proceeded from this to learn the business, appears to have led to some slight revival of Regular Service, and the bigger firms either take bound or unbound apprentices or employ lads regularly after starting them "about the shop." There are not, however, quite such frequent objections, as with joiners, to the migratory improver. Thus one foreman said, "I take on boys who are sacked from other firms. These can always find places because so few are entering the trade." Another

<sup>1</sup> See Chapter VI.

who had other boys as well as bound apprentices under him always tried to keep them on, though they were liable to dismissal. Another firm said, "We only employ boys casually when we are very busy," and yet another had sometimes to take on boys with their fathers; and in this case the two were paid off together. But a large number of the lads, especially in the smaller firms, are continually on the move, though it is possible that, as with the stonemasons, this restlessness has been somewhat checked by the recent long-continued depression in house-building. One employer complained that "the boys are always moving, so that it is impossible to make anything of them"; and among the smaller firms, especially those engaged in opening up the suburbs, the less regular system is undoubtedly very prevalent. A representative of the Trade Union spoke of much unemployment among youths in the trade, and implied the existence of a great deal of migration. He put it that "they steal their trade," getting into a shop usually through influence, staying there as long as possible, and then going off elsewhere. Finally, the growing separation of "solid" and "fibrous" work is rendering it difficult to learn the whole business in a single place, so that some migration is inevitable.

Stonemasons, again, show the same irreducible minimum of Apprenticeship and Regular Service, but the large firms take very few boys. Masons appear to be comparatively immune from seasonal fluctuations, partly because so much of the work is on large contracts which go on summer and winter alike, partly because men can be transferred to the yard when rain or frost stops work on the building. Cases are found where formal Apprenticeship is being abandoned, and the number of improvers is further increased by those employers who bind a considerable number of boys and then teach them only a single part of the trade, so that their only hope of learning it properly is to go on elsewhere. Complaint is also made that boys are always moving from firm to firm to secure better wages and only discover when too late that they are growing up very ill-taught. This, how-

ever, is not so marked now as in the years of very brisk trade between 1895 and 1900. Some firms, too, have both bound apprentices and improvers and as trade slackens some of the latter have to be put off. In this trade, indeed, there is little doubt that some of the most successful men have acquired the business by Migration.

In Bricklaying, even fewer contractors indenture their boys <sup>1</sup> and verbal agreements are uncommon. On most large buildings, however, there are one or two who are making themselves generally useful, and if they have the capacity, an effort is usually made to teach them. This leads, therefore, to some survival of Regular Service of the fourth type. Normally, however, the business is acquired by Migration or by a labourer working his way up. A young fellow gets an "insight" into the work in the latter capacity and then "gets hold of a trowel" and does the easier parts of it, and when a job comes which he cannot do, he "gets sacked." By this time, however, he has learnt a little. He then goes to another firm and repeats the process over and over again until he becomes competent. The higher parts of the trade he cannot master in this way, but he can learn them later on with the help of a Technical School. This method is strongly opposed by the Bricklayers' Society and can only be successful where it is weak or non-existent; but it is quite frequently practised.

In Painting and Decorating, several grades of workmen must be distinguished. Among the highly-skilled and well-paid interior decorators, employed by the West London Furnishing Houses, the few remaining apprentices are found. Occasionally, also, a sort of "patrimony" survives. Thus one well-known firm said "we have two or three families of painters who have worked for us for generations and the fathers bring their sons up to the trade." Otherwise this branch of it is recruited almost entirely from outside London.

The ordinary house painter employed on building contracts is seldom or never apprenticed, but starts as a boy

<sup>1</sup> Apprenticeships, when they exist, usually last for four years.

helping the men, then gets the rough work like "washing down" the walls to make ready for the painters, and next does a little of the easier painting, such as putting on the first coat or doing parts which do not show much. He thus gradually progresses. Occasionally, he gets regular employment from beginning to end in a single firm, but the marked winter slackness and the general irregularity of the trade is against this. Migration, therefore, is very frequently necessary.

Finally, there is the casual brush-hand, who gets into the trade anyhow, often when he has been compelled to leave his regular employment, since some of the work requires little more capacity than that of an ordinary labourer. Soldiers and, more frequently, sailors, turn to it and also the failures of nearly every trade, whilst large numbers of the chronically unemployed will be found to have done painting at some time during their lives. Those who wish to take to it permanently can soon learn enough for the purpose, for the trade has a few months of high pressure, notably in March, April and August, when almost any one can get a job, and the foremen are sometimes reduced to picking out "those who look like painters" from among a crowd of applicants.

As a whole, therefore, a marked feature of the Building Trades is that in them Regular Service has ceased to be a predominant system and is engaged in close competition with rival methods; but, at the same time, it is still insisted upon by the better-class employers, whose work is most regular. As in Printing, though to a much lesser extent, those firms that adopt Regular Service in one branch may do the same in others. Thus the few apprentices in Bricklaying are found where there are also joiners', plumbers', and masons' apprentices. This uniformity, however, cannot be relied upon, and more frequently indentures are only adopted with joiners or with joiners and plumbers. In Printing, the system enforced consistently by its largest and strongest section has extended or maintained its sway over the others. In Building its adoption in one or two branches sometimes

leads to its extension to some of the others, but this extension is seldom universal and never includes the painters.

This long description must find its justification in the fact that the Building Trades are in many ways typical of the state of affairs in those skilled industries in which Regular Service only shares the field with other methods. In some of them, indeed, conditions are even more chaotic than they are here: and their experience suggests the need for the general restoration, not necessarily of formal Apprenticeship, but of some form of regulated service suited to modern conditions. And just as, where Regular Service prevails, the presence of other methods is also found, from the few compositors' improvers to the much larger numbers in the case of Silversmithing, so, too, there is hardly any skilled trade from which even formal Apprenticeship has entirely disappeared.

A few words may now be said as to the relative position of Regular Service in trades where it is not predominant. Migration resembles it in the need for a long period of actual learning, and differs from it in the continual movement from firm to firm. Indeed, where a trade is divided between the two, Service usually survives in the more highly skilled branches and Migration elsewhere: but which will be adopted in individual cases can often be decided only as a question of fact. The latter is very frequently found in London. With the exception of Upholstery and, perhaps, Wood Carving it is quite as common in the Woodworking and Furniture as in Building Trades. Except possibly with the bodymakers, it is much utilized in Coach and Van Building, as it is also in the making of leather goods, and as already described has made appreciable inroads into the Art Metal and Engineering Trades.

Where a single mechanic or a squad is assisted by one or more helpers—boys, youths or adults—the younger workers spend some years serving the men before they get hold of the tools, and after this gradually work their way up. This is the process to which I have applied the term “ follow-

ing-up," and the trades in which it prevails form a group by themselves. In them a boy starts with a long period of Regular Service, not as a learner, but as a labourer who helps the skilled man and by this means gets to learn all about the work. After this he is given the tools and learns to do it himself. In this group are included smiths, plumbers, gas and hot-water fitters, leather splitters, boiler and tank makers, glass blowers and wire weavers, and in all of them except Leather-Splitting and Wire-Weaving, there is some survival of formal Apprenticeship. It is most common in Plumbing, not infrequent in Smithing and Gasfitting, but less so in Plating, whilst it is very occasionally found among the Rivetters, as one or two of their foremen try to insist upon it.<sup>1</sup>

The case is somewhat different when we turn to those employments which are properly described as semi-skilled, such as many of the processes in Boot and Shoe Factories and in Leather Dressing, Wholesale Bookbinding and Engineer's Machine Minding, to give only a few examples : for in them formal Apprenticeship, or even a long period of service, have ceased to be necessary or even desirable. If they have held their ground, therefore, it is not in these particular branches, but in those parts of the trade that have not been affected by the newer methods, and more especially where hand-work has survived, as in Leather Bookbinding and Bespoke Bootmaking ; for these still demand a high, and often a very high, level of skill, and need a regular training to produce it.

Hence, whatever method is predominant, there are very few trades in which there is no survival at all, either of Apprenticeship or Regular Service ; but where this survival is only casual, it has not the same value, since the method cannot then set a standard like it does where it predominates. Indeed, when Apprenticeships are rare, their appearance is sometimes the result of purely accidental influences. Never-

<sup>1</sup> This description of London must not be taken to apply to other centres, in some of which Apprenticeship to these trades is far more frequent.

theless, differences of method can often be traced to real distinctions in the character of the work or the class of shop ; and these will to some extent determine whether Regular Service or Migration shall be adopted.

First of all, as has been illustrated by the case of the Building Trades, size and organization often exercise a decisive influence. The work of the bigger firms is comparatively regular, whilst those of moderate size not only do not have such a consistent turn-over, but, even when they have, the numbers employed in the different sections may vary enormously. One job may need few men except bricklayers and masons,<sup>1</sup> another may employ a much greater proportion of plasterers, joiners and plumbers. There is, however, an increasing tendency for a firm to specialize on a single branch, Plumbing, Plastering, Masonry and so on ; whilst at the other end of the scale small firms will often be able to keep one or two apprentices continuously employed.

Secondly, differences in method often accompany differences in the quality of the work, whilst these different qualities may each be localized in separate districts. I have already described the case of the Furniture Trades, in which Service of some kind is almost universal in the high-class retail trade of West and North-West London, and Migration is very common in the much larger wholesale industry of the Eastern Boroughs.

Thirdly, there is often a line of demarcation between hand and machine work. The latter usually divides a trade into a number of semi-skilled processes ; but has if anything accentuated the need for Regular Service in the higher branches. Sometimes, especially with hand work, a seven years' Apprenticeship still survives as in certain classes of Bookbinding.

Finally, Apprenticeship, usually with a premium, will be resorted to where a special effort has to be made to get an individual boy taken, such as in cases of physical deficiency, with Jewish boys who need special

<sup>1</sup> A Church Restoration, for instance.

conditions to provide for their religious observances, and sometimes for the purpose of getting a bad or unmanageable lad taken. This latter device only makes matters worse as a rule, but the two former are legitimate and necessary.

Before leaving this matter, however, one may sum up shortly what are the different classes of firms who continue to indenture where this has ceased to be the rule? First, there are those very large firms of a type common in the Building Trades, whose organization is best suited by the regular employment of such boys as they teach, though usually they take only a few. With them the otherwise excellent conditions are modified by the taking over of many of the preliminary processes by machinery. Secondly, apprentices are found in businesses adopting a very high degree of specialization, which requires each boy to become a highly-skilled worker at a single part of the trade. He will still rank as skilled, and will be exceptionally so in his own line; but is at a disadvantage if he has to seek work elsewhere, owing to the small number of firms that require his particular skill. Indeed, it is this, rather than any actual deficiency in the teaching, that is the real cause of the trouble.

Similarly, the smaller firms who take apprentices fall into two classes. First, there is the ordinary run of them, who usually have room for one or two whom they are glad to take, especially if a small premium goes with them. Often they get sufficient variety of work to enable them to give training that is well up to, if not above, the average; and even if its quality does not allow of this, they are well fitted to give a lad a thorough grounding in the business. On the other hand, their work may sometimes lack variety, and be confined to one or two lines of goods, but on the whole they give a good chance of learning, and make an honest attempt to carry out their part of the contract.

This, however, is not the case with the other type of small apprenticing employer, namely, the premium-hunter. Such men often work alone or with not more than one or

two men, and have been described as "making their living" by always having one or two apprentices with a large premium of £30 or £40.<sup>1</sup> These they are usually unable to teach; often they "make trash" or do such a small variety of work, that even if they possess the capacity they cannot give their boys teaching of any value. Thus, even where the employer does his best, it is rightly contended that he has no more right than the deliberate exploiter to take apprentices, since he is not in a position to give them a proper training.

Lastly, firms of every class and size take Apprentices for other than business reasons, and between them bind a not inconsiderable number of boys. Sometimes the employer does not feel in a position to refuse the request of a good workman or the recommendation of a personal friend or business connection. Others, again, take a fancy to boys employed to make themselves useful about the works, and decide to indenture them. For instance, one small master in the Cabinet Trade does not usually take apprentices, and the five he has had during the last twenty years or so have all started with him as "little boys" about his shop, and have been bound because they displayed some capacity and aroused his interest. Moreover, frequent though such cases are at present, it is not probable that this "unemployed good-will" is as yet by any means exhausted. In this way, too, Skilled Employment Associations have sometimes found it possible to get over the refusal of a firm to apprentice: for "we sometimes induce them to take boys by getting them interested in our work or in the boys we send them." And Apprenticeship under such conditions is likely to have a peculiar value, since the giving of special care to the teaching is practically assured.

Taken as a whole, then, in the trades where formal Appren-

<sup>1</sup> An instance was given me of a Diamond Setter (engaged, that is, on the process of fixing the Diamonds in the mounting of a piece of jewellery), who for the last twenty or thirty years has never had less than two apprentices working for him. He gets with each a premium of £40, and is said to be quite incompetent to teach them.

ticeship is uncommon, we find that, even omitting the worst cases of deliberate exploitation, a good many of these apprentices are not employed under the most favourable conditions. For to set against the good small shop, the larger firms in the Building Trades, and the class last mentioned, there are those that are peculiarly unsuited for the purpose—the large works which are over-specialized and the small premium-hunters. Moreover, that type which is often best for the purpose—the business of medium size—frequently refuses altogether to bind itself by an indenture.

This, therefore, is the position of the older form of Apprenticeship in some industries, but the beginnings of a new, and what promises to be a valuable development is to be seen in the growth of short period Apprenticeships, usually for four years, instead of five, six, or seven. This practice combines, or may be made to combine, the advantages both of Regular Service and of Migration. It ensures regularity and continuity of employment during the earlier working years when the danger of a boy running wild is greatest. It also meets the frequent difficulty of learning a trade entirely in a single firm. Short Apprenticeships give a good grounding in a trade and "make a lad into a good improver," and as such he can perfect his knowledge by migrating to other places. Moreover, when he comes to do this, he knows what he wants and what the conditions of his trade require, and is of an age and experience to look after himself better, and so avoids, or at least is less likely to suffer from, the dangers that beset a younger improver. The chief objection to this method is that, if the binding is for too short a period, the employer may have no course but to specialize a boy upon one branch of the work; and it is perhaps unsuited to the most highly skilled trades. Still, under proper safeguards, it should help to solve many of our existing problems: and if ever a uniform system of training is to be restored it will probably follow some such lines.

At present the device of Short Service followed by Migration appears to be most frequently utilized in parts of the

Engineering Trades. It is sometimes adopted in heavy engineering, but is perhaps even better suited to the lighter work on electrical machinery and implements. In the latter it has to contest the field with a tendency to grade the work among boys in different stages of knowledge and skill : and in one important firm it was being adopted to replace less regular methods. After spending a certain time on various simple machines, the boys were to choose their trade from a number of alternatives and spend the rest of their four years' service at it. Again, in the Art Metal Group, shorter periods of three or four years are not unknown, and they are also found occasionally in the Building and Furniture Trades. Moreover, even where they are not actually in existence, some of the foremen are beginning to advocate them in the interest of the boys. In a large furniture factory, for instance, in both the joiners' and cabinet makers' shops, the foremen commended the refusal of the firm to indenture their lads on the ground that they should be free to move elsewhere after a certain time, and that they ought to do so. So, too, in the Building Trades a boy may be best suited by a small shop in his earlier years and by a larger one later on. These reasons, too, are also beginning to set employers against the longer period of indenture, and, generally speaking, opinion in favour of the new method appears to be growing.

On the other hand, Apprenticeship direct to the men seems to be dying out. It is still found in the process of Gold and Silver Wire-Drawing, a very small trade indeed, and occasionally in the Japanning of Leather. The most important instance of it, however, is in one of the preliminary processes of Leather Manufacture, namely, Fleshing, which may be briefly described.

After leaving the lime-pits, the skins are brought to a flesher. This man works over a beam and with a long, sharp, two-handled knife takes off the loose flesh which still adheres to the inner side of the pelt. The work is paid by the piece, and an unskilful workman can spoil a good number of skins. Apprenticeship usually begins at

about the age of eighteen and lasts for three years. The lad is bound directly to one of the fleshers, and is paid at a lower piece-rate. Half the difference between this and the normal rate goes to the man in return for his trouble, and the other half to the employer to compensate for spoilt pelts. Among the watermen, also, many boys are bound to their own fathers. Otherwise, the method only survives in individual cases, in which a firm allows a man to make arrangements for putting his boy under another.

Thus, to sum up the present position of Regular Service, we find that it varies from one industry to another, and takes a variety of forms. First, there is the universal enforcement or marked prevalence of Formal Apprenticeship, which is only found in the Printing Group and a few small trades. Secondly, some less formal type of Regular Service predominates without being universal—notably in Engineering and the allied crafts, in Optical and Scientific Instrument Making, and in the Art and Precious Metal Trades, though in all of them there is some survival of Indentured Apprenticeship. Hence, in one form or another, Service is the normal method of training in no inconsiderable portion of the Industries of London.

Thirdly, it is sometimes found to be predominant in certain parts but not in the whole of a trade. Thus, as in Bookbinding and Bootmaking, the machine processes are done by semi-skilled operators, but Service holds its own among the skilled handworkers. Again, as in Cabinet Making, it retains among the firms doing the higher class work the position that it has lost in the wholesale trade, and the division is largely a local one between East and West London. Finally, the presence both of Apprenticeship and Regular Service is found elsewhere in a small number of firms, sometimes, but not always, as the result of accidental circumstances.

The conclusion to be drawn, therefore, is that, in the wider sense of a regular system of teaching for a definite term, neither Service nor even Formal Apprenticeship can fairly be described as moribund. Modifications of

old practices are required, and greater flexibility is needed, with perhaps a variety of methods to suit the necessities of different trades. But in some at least the older conditions might well be extended or restored, and sometimes regret is expressed that Apprenticeship does not replace the less formal arrangements that prevail. Under present conditions, however, the informal system is being generally preferred, and both employers and employed find advantages in it. This preference, however, is not the result of any vital objection to the formal system : and all experience goes to show that employers, if properly approached, might be persuaded to reconsider the matter, and such reconsideration will be necessary if the less formal methods are not to take an even firmer hold than they have done already.

## CHAPTER V.

### LEARNING BY MIGRATION.

Meaning of Migration—Six Classes of Improvers—The Out-of-Time Apprentice and the Turn-over—Numbers increase with reduction in period of Service—The Short-Service Apprentice—The Country-Trained Workmen—Such Migration is really a completion of Service.

Migration as a Method is confined to the other types—The Exploited Apprentice—His later career—The Casual Fringe of Improvers—The Cause of this—Their Ultimate Chances—Presence among them of some abler boys—These influences bring about some Migration where Service is predominant.

Systematic Migration—Its Character—Description of its working in the Cabinet Trade—How a start is made—Its Adoption sometimes deliberate, more frequently due to chance—Its value to clever boys in poor circumstances—Start in unskilled boy labour—Migration usually exists in skilled trades, but not to the same extent in those requiring the highest skill—Often accompanied by unfavourable industrial conditions—Reasons for its frequency in the Building Trades.

Influences specially favourable to it—Subdivision of Output—Cabinet Making—Its Extent in it—Often a Necessity—Typical Cases—Its amount here must not be exaggerated—Much Regular Service still found—Similar conditions in the rest of the Furniture Trades—Its position in Upholstery.

Grading—Its Character—In operation in the manufacture of Lighter Electrical Machinery—Difficulty of absorbing all the Boys—Other examples—Machined Woodwork—French Polishing—Leather Goods Work.

Existence of Migration where Service predominant—Present-Day Conditions which favour its growth—Summary of its present position.

So much has had to be said in the last chapter about the position of Migration in certain trades, that a somewhat briefer treatment of the subject will be possible in the present one. In dealing with it, it is necessary to begin by distinguishing between the different classes of Improvers. For the Method of Migration, so far as it is a method, is

one of learning as an improver, but not all improvers will be learning by Migration.

When we come to classify them, it is possible to distinguish some six chief varieties, namely: the Original Improver or Out-of-Time Apprentice, with whom Turn-Overs can be included, the Short Service Apprentice, the Country-Trained Workman completing his education, the Exploited Apprentice, the Improver of the Casual Fringe, and the Migratory Improver proper. Of these the first three really use migration to complete an education begun under Regular Service. Migration proper applies to the others.

In its original sense the term Improver denoted a person who had already served an Apprenticeship, but had not become fully competent at his trade. It thus corresponded to the narrowest definition of a bound and indentured apprentice. Such persons are still found, and they have to work for a time for less than the ordinary rate of wages until they become thoroughly efficient. Sometimes their position is fully recognized, and a few Trade Unions make provision for it, and even fix a limit of time within which full wages shall be paid. More frequently, indeed, such arrangements are left for employer and employed to agree upon between themselves. In Printing, however, an apprentice must obtain his full money on coming out of his time, but in this there is a period of seven years' service, and subsequent Migration has not been rendered so necessary by developments of machinery, as it has been elsewhere. The plasterers again insist, not always successfully, on the payment of full money at twenty-one. But in other trades improvers of this class are not uncommon; and sometimes there is a sort of tacitly accepted idea of the rate an apprentice ought to get on coming out of his time. For instance, in one case in the Building Trades, I was told that in the last year of his time he would receive £1 or 21s. per week, and that at its conclusion his money would be raised at once to 8*d.* per hour, and that he would get the full rate in about two years.<sup>1</sup>

<sup>1</sup> Since this was written advances have been obtained by most sections of this industry in London.

Various causes keep up the numbers of these improvers. The length of an ordinary Apprenticeship is being reduced, and five years has outside the Printing Trades become the normal period. Often this is due to the impossibility of learning the whole of a trade in a single shop, a thing which in other cases has led to Short-Period Apprenticeships or to Migration pure and simple. Further, some foremen hold that five or even seven years are insufficient to learn one throughout, and that at the close of them, even if his knowledge is complete, a man lacks experience and adaptability, and thus a short term of Migration at something below the full rate will be to his advantage. Finally, the attitude of bound apprentices may sometimes lead to similar results. Employers and foremen both complain that they presume on their secure position and only really apply themselves to their work in their last year or two. Hence they have still a good deal left to learn when they come out of their time.

To these must be added another class. When a firm goes bankrupt or retires from business, some of its boys may still have part of their indenture to serve. Normally, they would be transferred to another employer and bound to him for the remainder of their time. They would then be known as Turn-Overs or Turn-over Apprentices. Sometimes, however, a man may neglect, or not be able, to make such arrangements, and the only way in which the apprentice can complete his education is by getting a job as an improver ; or his employer may prefer to provide for him in this way rather than by a formal turning over. On the other hand, some firms who do not ordinarily employ improvers will take on those who are really Turn-overs, in order to give them a chance of finishing their education, since this is often the only way for them to do it.

The Short Service Improver has already been dealt with, and reasons have been given for supposing that he will grow in numbers, as this device replaces both the longer formal Service and the more casual Migration. Short Service really represents a combination of the two, and under

favourable conditions obtains the advantages of both. It aims at giving a general groundwork in a trade, and turning out the learner at the end of his time as a "good improver," fit to make his way up for himself. It seems also the best calculated of any existing system to meet all the difficulties of the present industrial situation, and everything seems favourable to its development. Moreover, the distinction made by some firms between the improver who has had a regular job of three years or more, and the one who has not, points in the same direction, since some who normally adopt a full period of Service will refuse to take the latter, but, if they have a vacancy, will find a place for the former. In any case the development of the Short-Service system in a trade will of necessity increase the number of improvers in it.

Thirdly, there are the country-trained apprentices or workmen, who are so numerous in some industries. They come mainly from country districts, the country towns and the smaller boroughs, and have usually served their time in a shop of small or moderate size possessing little machinery. Now under these conditions a more thorough all-round training can be given than that which is often obtainable in London. The countryman, indeed, has still to master the finer work, the greater speed of working, and the special conditions of machine production, which are frequently characteristic of it; but often, though by no means always, he makes in the end the best tradesman. To do this, however, he must first spend a few years as an improver in the "finishing school" of London Industry.<sup>1</sup>

Now all the improvers hitherto considered have this in common, that the training they are receiving is simply supplementing and finishing off that which they have previously obtained under Regular Service. The two, in fact, are not competitive but complementary. In the case

<sup>1</sup> "As already indicated, in many branches of the [Building] Trade London is an excellent finishing school, but a bad training ground." Booth, *Life and Labour of the People in London*, vol. v., p. 100.

of Short Service, indeed, this is the result of a more or less definite arrangement. What has to be remarked, therefore, is that each of these classes accounts for a considerable number of improvers, and that this number is tending to expand. Thus, even in trades where Regular Service is markedly predominant, their existence can be noted; but strictly speaking, they are not learning by Migration, but are merely completing a training given hitherto under the other system.

As a method of training proper, therefore, Migration is confined to those who acquire their trades "wholly or mainly" by means of it. It is thus limited to the remaining types; and in two of them, that of the exploited apprentice and of the casual fringe, it is largely the result of mischance or misconduct. Nevertheless, they account for a good proportion of those who learn in this way. To suppose, however, that the deliberate exploitation of boys, whether by their employers, their parents, or themselves, is at all general, is in my opinion both inaccurate and unfair. Cases of it are more numerous than they should be, but, existing conditions being what they are, it is rather surprising that they are not even more common. Far more frequently the trouble results from ignorance, lack of information or mistaken ideas, from lack of means on the part of the parents, or from the demand made on the employer to pay the full value of a boy's labour. Where, however, exploitation does exist in any form, full training can only be obtained or completed by means of Migration.

Where the fault lies primarily in the employer, a distinction must be made between those who do not teach and those who cannot. At the worst, five or six boys are taken and bound, if possible with a premium, few, if any, men being employed. They are then kept either at mere labouring or have the work so parcelled out among them, that each does only one or two processes and soon comes to do them well and rapidly. Being confined to them, however, they come out of their time knowing very little more than when they began it. Such firms usually prefer an indenture as an

excuse for offering lower wages and for the power it gives of keeping boys bound to them for a number of years. Even so, indeed, the bolder of these will run away from their service, in the confidence that their master will not care to face publicity. Happily also such extreme cases are rare, and they naturally attract an amount of attention quite out of proportion to their numbers. More frequently there is a partial failure to teach, and the training given is more or less defective. The boys are taken for what can be made out of them, and left to fend for themselves. Thus Technical Instructors have known them in such cases to "burst into tears" because they are nearly out of their time, and do not know many essential things, and have small chance of learning them where they are.

Similarly with employers who cannot teach, there are extreme instances, as already described, in which the man is a "duffer" who makes trash, and very little of that, and ought not to be allowed to have an apprentice at all. Others do more, till we get the shop which teaches a good part of a trade quite fairly well, and gives its boys reasonable chances of becoming in time fully competent workmen, though it leaves them a great deal still to learn after they leave it.

It follows, therefore, that members of this class vary in character, position and opportunity of rising. Those who come out of their time practically untaught, have very small prospect of becoming tradesmen. At twenty or twenty-one they still have almost everything to learn; and the mere fact that they have submitted for so long suggests that they lack the necessary "grit" to overcome difficulties and face ordinary competition. With others the chance is much more promising. Those who have been partially taught will, indeed, have to wait for some time longer than they ought to do before they get the full journeyman's wage, but there is no reason why they should not get it in time. Their chief danger is that they will not grasp their need for improvement but be content to remain as they are. It is, however, those who most quickly realize

their position, and leave their indentures to get new situations, that are most likely to do well : for by so doing they have already shown the pluck, energy and insight that lead to success. Anyhow, if either type of boy is to make himself thoroughly master of his trade, he will have to do so by means of Migration, and he will have so much to learn, that he can fairly be described as having acquired it mainly, if not wholly, in this way.

The improvers of the casual fringe are usually boys who for some reason or other cannot or will not stick to a job. Such are to be found in almost every trade, however regular its methods may otherwise be, with the exception of a few whose organization is very strict indeed. They include those who, because of defects of character or ability, are always being compulsorily moved on, or who are otherwise competent but too restless or quarrelsome to retain their positions and so throw them up for trivial reasons before they have had time to learn much. Even so some of them do manage to acquire a partial or, more rarely, a complete knowledge, but others move continually from trade to trade, and end by becoming men " who can do anything " but not any one thing.

Complaints of the " big shilling " are also frequent, and some youths can always be enticed away from a place by the offer of rather higher money elsewhere. It may even result in their leaving skilled work for an unskilled job. More frequently they stick to the same trade, but go to one firm after another. In this case the habit is more common when business is brisk than when it is slack. Thus in the Building Trades youths who could get good wages in the boom years between 1896 and 1900, afterwards found that their defective training placed them at a serious disadvantage. But there is always some movement of this kind going on, quite independently of these fluctuations.

Undoubtedly many such boys fail eventually to become competent workmen. Those of the last class are most likely to succeed, since some of them do keep their eye on their chances of learning as well as on the money to be

earned ; and at times some of the others pull themselves together. But more often than not the position is irretrievable. Some become very expert at one part of the work and earn good money whilst working, but get very irregular employment. Others, again, may get steady employment at wages somewhat above those of a labourer but below those of an artisan. Others fare even worse.

The causes of the trouble are various. Carelessness and lack of supervision are responsible for much ; unemployment in adolescence is even more fatal than in manhood ; and the selection of an unsuitable trade will lead to much harm, especially in a disposition naturally restless or lazy, but capable of steady application to a congenial task. The matter is largely one for organization—to dovetail jobs, to put the round peg in the round hole and, where necessary, to keep the boy steadily occupied in the more beneficial forms of unskilled work. Usually prevention is the only cure, and habits of restlessness once acquired can rarely be eradicated or a record of dismissal and incompetence lived down.

An altogether different type of improver, though resembling these last in belonging to the casual fringe, is the youth who takes advantage of such opportunities as occur, and advances himself by his own efforts from an unskilled boy labourer to the position of a mechanic. In some industries in which Regular Service is predominant, there are jobs, especially in small repairing shops, which provide a sort of half-chance of learning for those who have grit enough to take it. Usually a boy starts by obtaining some kind of unskilled work in connection with the trade, and picks up in this way enough knowledge of it to enable him to better himself. Then when his actual position, which after all is a boy's job and only worth a boy's wage, no longer provides for him, he has to go, but by this time he knows enough to get a better position elsewhere as an improver. The following is a case in point :—

A lad, after a short time as Telegraph Messenger and

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two years as Railway Page Boy, got a job in a small engineers' shop containing two men, attached to a large under-clothing factory. He got it quite accidentally in answer to an advertisement. Starting as a porter, he came later to clean the motors by which the machinery was driven, and to help the men in the engineer's shop. He had, however, to do all sorts of other work; but when the two mechanics had a lot on hand he assisted them, and the one in whose charge he was helped him to get on. He went to a Technical Institute to learn smithing and took up turning there, and when I saw him was looking out for a job, if possible as a turner's improver, or, failing that, as hammerman, with a view to becoming in time an improver to smithing.

Such openings would be useless to many, and it is only a very few who have the ability to turn them to account as stepping-stones to better things. But one merit of the less formal Service is that it does more often leave an opening to the abler of such boys thus to "steal their trades." Cases of this kind are not, indeed, numerous, but they do provide for a few who might otherwise remain labourers all their lives.

It is obvious, therefore, that even where some form of Regular Service is predominant, there is still room for a certain amount of learning by Migration without counting those improvers who are simply completing their education. The position is that Regular Service is accepted voluntarily and not under any compulsion by the bulk both of employers and employed, but there are shops of an inferior type and boys who lack steadiness or ballast who find employment in them as improvers; and there are other occasional outlets for them. These, however, must not be confused with the kind of Migration that prevails where it is a definite method of learning and covers a large portion of a trade.

Systematic Migration of this kind is found where such a movement from firm to firm is so common a process as to form a readily available alternative means of entering

a trade. There is no longer any Regular Service in the sense in which the term has been used, but the youth leaves one place and goes to another as circumstances or inclination dictate—when he is sacked, for instance, or when he sees the chance of a rise in wages. Moreover, the employer comes to regard such improvers as integral parts of his establishment, and up to a point treats them like journeymen, taking them on and dismissing them according to the needs of his business. There thus often grows up a definite demand for them, and classes of work are set apart as specially “suited to improvers.” Sometimes, indeed, the product gets graded according to the price paid for doing it, or the skill it requires. In speaking of Silversmithing, for instance, one young fellow said: “You don’t have improvers, but each hand is paid a different amount according to what he is worth.” Where such conditions are found the amount of Migration is usually large.

A description of the method as it prevails in the trade that is most typical of it, namely, the East London Cabinet Trade, may be quoted here in the words of a small Master Cabinet Maker.

A “little boy” of fourteen comes into a shop at 6s. a week to run errands. He does not do the work or possess any tools, but from watching the men at work he gets to know how it is done. His wages rise to about 9s., the most he is worth as an errand boy, and when he asks for 10s., he is refused and leaves. He gets another job for about 10s. a week, saying he can do some simple thing, and on being sacked or leaving that place, gets another to do a harder piece of work at a higher wage. This he may not yet have done, but having seen others do it, he contrives to carry it out sufficiently well to keep the place. Thus he gradually makes his way, till he can earn full money, and if he is smart will have learnt to make not only a single article but a variety of them.

A commencement can be made in a variety of ways. Some boys have fathers or relatives who own a small shop and take a turn at it first with them, and others, before they start, get a friend to give them a few hints or learn a little at a Trade School. Usually, however, a beginning

is made by obtaining a job in some shop as odd boy, since this is likely to lead to a chance at the bench, which any foreman will give to those who are smart and capable. Often the lad's father or brother is at work there and so gets him the place.

Sometimes boys will deliberately set themselves to learn by Migration because, among other reasons, Apprenticeship is falling into disfavour with them as well as with their employers. The comparatively low wages of the apprentice cause them to prefer to make their own way : and the best of them will, as a matter of fact, acquire their trade by Regular Service, probably of the fourth kind, namely "Working and Learning." Getting a job that suits them, they keep it. Their wages rise with their knowledge, and their services to their employer make it worth his while to pay them well. Hence it is not surprising that some of the smarter ones, choosing not only their trade but their mode of acquiring it, prefer Migration, or at least choose to take their chance of having to move. "Is it to be expected," said one foreman, "that a smart chap will take lower wages and perhaps pay a premium, when by the help of the Technical Schools he can learn just as well without?" Similarly, those who have received two or three years' preliminary training in a Day Trade School are often capable of taking an improver's job at once, and working their way up from this. These last are found mostly in Building, Woodworking and Art Metal, and in Engineering they start usually as apprentices.

Again, Migration, whether adopted deliberately or not, is of great value to clever boys whose families are in such poor circumstances that they have to earn the largest possible amount as soon as they leave school. By its means they still keep open for themselves the possibility of entering skilled work, and Juvenile Labour Exchanges might do much to assist them to make a start in this way. Similarly, where learning is subordinated to wage earning, but not lost sight of, they may quite well become first-rate workmen, more particularly if they obtain adequate help and guidance.

It not unfrequently happens, however, that boys start with the idea of learning a trade wholly in one place, but afterwards migrate to other firms. The more informal types of Regular Service especially leave many loopholes for this. Thus, if they feel that their job does not give them sufficient scope, or that they are not learning as much as they ought to do,<sup>1</sup> they move on and seek better teaching and finer qualities of work or greater variety elsewhere. Sometimes, indeed, this will be done with the co-operation of a sympathetic employer or foreman. It should be remembered, however, that when a good boy gets into a good shop, he is apt to stay there. Thus, whatever his original intention, he does not in fact migrate, and his Service becomes regular.

Nevertheless, whilst a good many definitely choose to utilize Migration, the great bulk of those who enter a trade in this way, do not do so deliberately, but more or less as the result of chance. Wherever the method is common, there are always plenty of openings at the bottom for unskilled boy labour, and, after working at them, lads find that they have a liking for the business, and that there is an opportunity of entering it. So some of them learn it, others learn only a part of it, and yet others simply move on after a time to another unskilled job. The "boy about the shop" is common everywhere, and special trades have special boys, like the glue-boys in joinery and cabinet making, whilst the small masters often give them a little of the actual work to do. An acquaintance of mine, for instance, is engaged in making what-nots, which he prepares and fits himself, whilst his wife does the polishing and the lads mind the glue, run the errands and do things like sand-papering. Now some of them have left him for a better job and eventually learnt Cabinet-Making as he in his time had done before them. There is the danger, indeed, that they

<sup>1</sup> Thus a Trade Instructor in Silversmithing said—"Improvers in our trade consist either of the clever, able boy, who feels that his ability is not being given sufficient scope or of the boy who for incompetence or other reasons cannot keep any place long.

may become makers of what-nots or of small tables or of a particular piece of furniture only and not cabinet makers. For the conditions prevailing here result among other things in the growth of much specialization on single articles ; and from lack of guidance many boys fail to make the best of their chances ; and of the openings which exist, some only will be utilized fully, others partially, and yet others not at all.

The industries in which Migration is most common are usually skilled, but are not as a rule such as to require the very highest type of skill. Thus in Optical and Scientific Instrument Making, and in a great deal of Engineering, it is strongly discountenanced, and Regular Service is insisted upon, as is usually the case with the firms doing the finest work in the Furniture Trades. At the same time this tendency must not be exaggerated, and many first-rate workmen have learnt by Migration. Further, it is most prevalent where certain conditions exist which are in many ways unfavourable to sound training. Thus, the occupations in which it is common generally show either a marked seasonal character or much casual employment, and individual firms experience ups and downs of activity quite apart from the general state of business. These influences, indeed, render it convenient for employers to be able to engage and dismiss boys and youths, just as they do adults, and so make it desirable from a business point of view. Many firms, however, are averse to dismissing a learner if it can be avoided.

Two circumstances, however, peculiarly favour the growth of Migration, namely, the subdivision of production or output among different shops, and the "grading" of the work among different workers at varying rates of pay. Its prevalence, however, is not limited to cases where one or both of them is present. A notable exception is to be found in the Building Trades, in most of which it flourishes. For this there are a number of reasons, and more particularly the fact that in them, without so marked a subdivision as that just mentioned, it is still difficult to acquire the

whole of a trade in a single firm. The bigger works often have a varied output, but there is frequently a division into men's, improvers' and boys' work. Again, an extensive use of machinery may remove from a lad's experience many of the rougher and simpler jobs which it is desirable he should learn, even if he may never be compelled to perform them as a man, since they help to give the best preliminary grounding. Now in the smaller shops he will get them, but in the bigger ones he will not ; and this, therefore, has to be set against the undoubted advantages of the latter. Indeed, he will sometimes go first to a small firm for a few years, and get to know what he can there and then remove into a larger one, thus naturally dividing his course of training into two parts. In one branch, that of Plastering, the need for this is even greater, owing to the growing number of businesses which specialize either on solid or fibrous work. Finally, the growing dislike of Apprenticeship among both employers and boys, and the desire of the latter to be free to move, has led to "much swoopping of shops and foremen." For all these reasons, therefore, the method of Migration is common in the Building Trades, and they stand in many respects midway between the old conditions and those in which subdivision almost compels migration ; and in them its growth is much encouraged by the existing absence of system.

Of the two great influences at work the operation of the first is most clearly seen in the Furniture Trades and especially in Cabinet Making. The latter covers a far wider area than its name would imply ; for it includes the making of most articles of furniture or of woodware about a house which "are of light character, and used for purposes of ornament, and are not fixtures in the building,"<sup>1</sup> and in addition to them cabinet makers are employed in the manufacture of telephone stands and boxes, and of cameras, barometers and looking-glass frames. Now in this trade specialization of product or output is carried further than in almost any

<sup>1</sup> This definition was given to me by the Head of the Wood-working Department of a well-known Trade School.

other. Some of it is found in certain large firms in which there is also specialization of processes, and far more in the small hand shops which abound in East London. Now the cabinet maker's products vary very much in style and character, and where they are easy to make and of common quality, an improver will often be as useful as a journeyman. Thus, in the windows of a Labour Exchange one may see advertisements for "a cabinet maker or good improver," or "a cabinet maker for cheap barometer frames to joint-up—improver will do."

This, in short, is work specially "suited to improvers," and it will vary from what a boy who is just beginning to learn can do to such as will fully test the capacity of a young man who has mastered a large part of the business. Moreover, the conditions as to employment are markedly variable in every way, and many small firms cannot give regular employment to their boys, who will for this reason alone be compelled to move about; and thus Migration under present conditions becomes practically a necessity. The most marked case of seasonal fluctuation, however, is to be found not in Cabinet Making, but in the Pianoforte Trade, and here, too, movement from firm to firm is common.

A few typical cases of the working of the method may perhaps be of interest. The first is that of a foreman—a comparatively young man—in the cabinet shop of a firm of Makers and Importers. He began life as an odd boy about the shop, and when not otherwise engaged was given sand-papering or, later on, a little simple manual work. Thus, he gradually improved his wages and got hold of a few tools, and failing to get a further rise, left the firm he was with, and found another place where he got rather more money and learnt a little more. This process he repeated, and after about five years knew enough to be put on piece-work like a journeyman. From this he continued to improve himself, and in all worked in about eight places to master the trade, staying usually nine months or a year in each. He declared this method to be one by which a smart boy could always learn and learn well. It

would be the master's interest to bring him on as rapidly as possible, in order to get the best return for his wages, whilst, if dissatisfied, a lad is free to leave and go elsewhere.

Another instance was that of the son of a cabinet-maker,<sup>1</sup> who always had a liking for this trade. His father did not wish him to enter it, but he persisted, in spite of opposition. First, however, he spent six months in a surveyor's office at 6s. a week. Not caring for sedentary work, he went on trial for a month as a compositor's apprentice, but did not like that either. He then got a job as a cabinet-maker's boy and after two months was put to the bench. His wages to start with were 5s. and had risen to 7s., when a question of a lost tool cost him his place. He next had two jobs, each of six months' duration, as an improver on very cheap work—first at 11s. a week, and then at 13s. In both cases the firm went bankrupt. After this he worked piece-work alongside of his father and further improved himself, his earnings increasing from 15s. to £1, and since then he has been employed for two years by another firm, his wages rising during this time from 5*d.* to 6½*d.* an hour. Here he sometimes had to work short time, but had never lost more than a day or two between each job. When I saw him he was contemplating another move and expected to get full money after another two or three years. He did not regret his choice of a trade.

Another learner spent a year after leaving the Elementary School doing odd jobs in various shops, and for six months more was errand boy to a Clock Repairer, who taught him a little. A brother who had a small cabinet-making business then started him in the same capacity at 5s. a week, and after five years he was getting 12s. 6*d.* as an improver. He was under some sort of agreement to learn the trade, but was dismissed for slackness. In less than a week, however, he got another place and after nearly two years was earning

<sup>1</sup> This and the three following cases are the industrial histories of students at one of the Maintained Institutions of the London County Council, who, by the kind permission of the Principal and the Instructors concerned, I was enabled to interview.

25s. a week piece-work and expected to take some years more to get the full rate. His slow progress was attributed by his instructor to the fact that he was probably mistaken in his choice of a trade.

A third student had begun with two years at a Day Trade School and started at about seventeen years of age at 10s. a week for a Bermondsey firm, being put off for slackness after three months. His next job where he earned 4d. an hour lasted the same time, when he left to go to the firm where his father worked. He stayed there for two years (his wages rising from 4d. to 5d. per hour), and when I saw him had just started for another firm at 6d. per hour. In all he had had about seven weeks unemployment during this time.

One more case may be given, that of the son of a Foreman Decorator, who was himself an Instructor in a Technical School. In his case manual training at an Elementary School brought out a liking for wood-working, and though he began as a clerk, he continued his woodwork during the eighteen months that this lasted. His first job at the trade brought him in 15s. a week at the start and, when, after eighteen months, the firm was wound up, he was getting 4½d. an hour. After three weeks "out" he got a further job for another seventeen months, and at the end of this time was getting 6d. per hour. That firm also closed down, but after a few days he got another situation, and when I saw him he had been working there for two years and was getting full journeyman's money (10½d. per hour). During the time in which he was learning he had been unemployed altogether for about two months only.

Such, on the whole, probably represent fairly the conditions under which the better class of improver acquires his trade; but those who attend Technical Schools are above the average in ability, in opportunity and, above all, in success. Even for them; however, the normal alternative is either constant movement or slow progress; and with others, the change of situation is likely to be more frequent, unemployment longer in duration, and progress slower and

more doubtful, the more so as the high immediate wages paid to improvers often compel the employer to keep them on the kinds of work which they can do well.

Even in the Cabinet Trade, however, the prevalence of Migration must not be over-estimated, common though it is in East London and in the wholesale trade generally. Most of the higher-class firms, still retain some form of Regular Service, usually without a binding agreement, and even in East London there is a certain amount of it, including some Indentured Apprenticeship. Again, some small firms take apprentices in return for a small premium, and some, both large and small, without one. Moreover, the Jewish Board of Guardians are active in binding their boys to this trade, and the local Skilled Employment Associations are able to place a certain number in it.

Similar conditions prevail in other branches of the Furniture Trades, though in some of them Migration is not nearly so frequent. In Upholstery, for instance, the proportion of workers engaged on better class work is larger, and, being entirely handwork, it is so far better served by Regular Service or even Formal Apprenticeship, and machinery does not exercise as great an influence as it does in Cabinet-Making. Indeed, Bound Apprenticeship is sometimes continued among Upholsterers by employers who have otherwise abandoned it. Still, there is some subdivision of product between good and cheap, and between large and small, work, and some firms confine themselves to a single line of goods. These tendencies are not carried so far as they are elsewhere, but they are sufficiently developed to cause appreciable use to be made of the method of Migration, though even in the wholesale trade, it is neither so frequent nor so necessary as in Cabinet-Making.

The histories of a class of boys and young men bear out this contention.<sup>1</sup> Their mode of becoming Upholsterers had been as follows :—

<sup>1</sup> In these the comparative frequency with which a lad starts as an errand boy and works his way up is worth noting.

- I. Premiumed Apprentice for five years by Skilled Employment Association.
- II. Started with his father and had been in two jobs in five years.
- III. Apprenticed without a premium.
- IV. Started on an errand boy's job, picked up a bit in three years and was then apprenticed elsewhere for a further three.
- V. Had served a five years' Apprenticeship with a West London firm and was working as an Improver.
- VI. Said he was apprenticed *for two years* (!).
- VII. Started learning as an errand boy and was intending to make a move.
- VIII. Worked his way up in a single firm after starting as an errand boy.
- IX. Started as an errand boy and became an unbound apprentice.
- X and XI. Apprentices indentured with a premium by the Jewish Board of Guardians.
- XII. Apprenticed in Reading, from which place he came to London.
- XIII. Going to be apprenticed shortly.
- XIV. Son of a Moulding Manufacturer and going into this but studying Upholstery as well.

Thus of these not more than three could fairly be described as learning by Migration. The presence of others apprenticed by institutions like the Jewish Guardians and of one or two from West-End firms has to be allowed for, but even so the number, whose Service was actually regular, is significant. At the same time, there is undeniable evidence of the existence of Migration; and this is likely to be far more common in those branches of the business which are not so well represented among the students. It is the better-class boys who attend a Trade School, and they come, on the whole, from the better-class firms, and so their employment is more than usually regular.

Hence over the trade as a whole, the demand for the migratory improver is far greater than would appear from the instances just described. The Labour Exchanges may be quoted as showing this in their demand both for actual improvers and for boys "able to do" this or "used to doing" that, who are such, in fact, if not in name. In the roughest kinds of work, the stuff is simply knocked together, and there is sometimes little to teach, but some of the boys do learn enough to make them ambitious to learn more; and the prevalence of casual employment and an irregular demand makes it necessary for some of them to be taken on and dismissed according to the state of trade. Indeed, two years at a Day Trade School previous to work in the shop is suggested partly to meet these circumstances, and partly in order that the boy, instead of running wild, may start at their close with some little knowledge of the business and a clear idea of what he wants. Moreover, in a trade like this, those who begin with the idea of Migration may very well find that the shop they are in can give them nearly all that they require, just as sometimes, where Regular Service prevails, circumstances may induce them to move about.

The second great underlying cause of Migration is found in the "grading" of work within a single firm. Here it is not necessary that, as in the first case, the output of each business should be concentrated upon a few articles, though this may sometimes be the case. Nor is there that complete specialization on to single machines, which produces a class of semi-skilled workmen. What happens rather is that the production of a firm is divided up into a number of parts and graded according to the skill required in each of them. Much of the work, therefore, does not need fully trained hands: and so is carried out by a number of boys or youths in various stages of development, who are paid according to their value. This is likely to happen where a great variety of machines of different degrees of complexity are in use, though that is not a necessary condition of it. In any case, there is a great deal of work "suited to improvers,"

and they are given ample opportunity of working their way up.

It has already been pointed out that the predominance of Regular Service in Engineering does not extend to those concerns in which the scale of production or the character of the work render some form of subdivision feasible, especially those few which are engaged in new construction upon a large scale. In heavy engineering, this has led to the employment of a number of semi-skilled machine-men, but some of the younger and more ambitious of them contrive to learn the trade by migrating as improvers. Of them an employer said that "there are a good many in the trade, coming mostly from large firms where work is very much specialized."

It is in lighter engineering work, however, that the method of "grading" is found, and it is by no means confined to the larger firms. In the electrical branch both trade fluctuations and the irregularity of orders are marked, whilst the work lends itself to this practice. There are varying degrees of difficulty in it, and so there is a tendency to have a worker for each: and a number of grades of gradually increasing skill have thus grown up between the boy and the man. As one employer put it, "our work is such that we get certain classes of it in which we only want a hand earning so much an hour and so we get an improver"; and as these vary in skill, a young fellow has the chance of improving his position bit by bit and of progressing from one to the other. Often, and perhaps usually, he will be paid his full value, and so must depend upon himself for what he learns.

The ordinary process of learning is more or less as follows. A lad, sometimes at fourteen, sometimes later, starts on a machine at the current rate of wage, beginning usually on a punch-press, and being raised as he wants more money to a drilling machine. For two or three years his work requires little skill, but he gets to know his way about the shop. Next he will be promoted to the position of an improver at about 3½*d.* per hour and start on some more elaborate job. The employer just quoted stated that some of his

boys stayed on with him, especially if they were promoted to the fitter's bench, and that others left to take improvers' jobs elsewhere, whilst they themselves took them in from outside as they required them. Regular Service is thus replaced by a gradation of employment, which springs naturally out of the conditions of production and wage-payment. Possibly the difference in the actual teaching given is not great, except for the liability to a constant change of firm.

Here, indeed, the most difficult problem is perhaps that of absorption. A good proportion of the lads can and do make their way into the trade: but the lighter electrical work probably takes more boys or youths than it can itself find room for as men. Further, there are some processes in it which are little more than a superior kind of Blind Alley, in which the lightness and easiness of the work limits the highest wage obtainable to that of an improver or at best of a low-skilled adult. At the same time, some of them, as, for instance, the making of certain parts, tools and accessories, give knowledge and information enough to provide a start in learning which could be continued elsewhere. Moreover, the number of learners in other parts of the trade is sometimes less than it requires, so that some at least of the superabundant improvers in electrical work can find other positions to complete their education in, whilst its generally rapid expansion enables it to absorb more young workers than most other industries can.

There are further examples of gradation in two important branches of wood-working, those of sawyers and wood-working machinists and of French polishers, both of which have their services utilized in a number of trades. With the former, the level of skill is more varied than among the joiners and cabinet-makers who use their products. Partly owing to the danger involved and partly to the intricacy of much of the machinery, the best workers earn more than the men in these two crafts, but in other cases both the skill and the pay are much lower.

As regards the training required, indeed, the trade falls

roughly into two parts. A large number of mills confine themselves to the sawing of timber into lengths and widths, sometimes, but not always, rough planing it as well. In them, though there may be one or two planing machines, nearly all the work is done at the saw-bench. This is worked by a man, assisted by a boy to "pull out" and remove the wood after it has been cut. Here the man's job is little more than semi-skilled, and so far as the boys are concerned, the work is a Partial Blind Alley. The smarter of them are promoted to fill vacancies among the sawyers, but only comparatively few can be provided for in this way.

Where, however, the wood is worked as well as sawn, a considerable variety of machines is used, and far greater skill is needed. There is some specialization on particular machines, and their number and the different degrees of skill involved in working them form a gradation of employments for the learner who can take advantage of it. Bound apprentices are rare. Like the sawmills, pure and simple, these factories require boys to do various kinds of labouring work, but the numbers required by them are nothing like so much in excess of what they can find room for. Hence those who have their wits about them learn enough to get on to a simple machine, either in their own or another factory; and this trade, like some others, demands boys who "understand" or are "used to" one or another of them. With the large Builders and Contractors, for instance, where very few boys are taken, they are usually promoted from the gluepot and put into the machine room if they show capacity. In this case, indeed, they are put right through the trade and employed regularly till they have mastered it. Otherwise migration is common and is favoured by the fact that youths of different ages are required for different machines. The present lack of organization and guidance for the boys is, however, responsible for many failures, and probably far more enter the trade than succeed in acquiring it.

The work of the polisher covers an even wider area. Under this head the French (wood) polisher and the metal polisher may both be included, as the same conditions of teaching

apply in both, though the latter's work is rather more skilled and its conditions more regular. French polishing in particular is often described as being done by women and girls only, or by unskilled boy labour; but this is an exaggeration. Undoubtedly much of the latter is employed on the less skilled jobs, but it is also on these that women and girls are being introduced, with the result that on the average the skill of the men who work at the business has rather increased than diminished. For the same reason the amount of Blind Alley work has been reduced, so that the excess of young boys entering it is not so great as it was. Thus to the bulk of them polishing offers a definite opening and demands from them a fair or even sometimes a high level of skill. Its irregular character and the prevalence of casual employment are, however, against it.

Here the gradation is unusually well marked. At each stage which a lad reaches, there is a demand for boys to do just that kind of work, and so there is also when he has improved himself a little more. First, there is a "boy for polishers' shop" (i.e., to run errands and do odd jobs), then "boy to help polishers," "boy who knows a little polishing," "boy who understands polishing," and so on till the "polisher's improver" is reached and finally the improver who "will do" in lieu of a polisher. Each job is a little better than the one that is left, a little worse than the one next taken. Actual Apprenticeship is rare and except in the larger firms Regular Service is not common; but, given proper organization, the existence of such a sequence would be some compensation for their absence.

In the making of leather goods, again, this method is often found. In the manufacture of boots and shoes, indeed, the work as a rule is either semi-skilled or as in the Bespoke Trade so highly skilled as to require Regular Service, whilst in saddlery and harness-making such boys as are taken are usually bound apprentices. But in the making of portmanteaux, trunks and bags, and of such smaller articles as purses, pocket-books, and attaché cases, it is common, though there is also some Apprenticeship and

Regular Service. There is, as usual, the start as an errand boy, the learning to make a particular part and the demand for boys who can make "straps" and "handles" and so on, then for the improver, and finally for the one who "will do" instead of a man. To describe the method in full would only be repetition.

This concludes the consideration of those trades in which Migration is most prevalent, but in a number of others it still exists as a distinct and competing process side by side with the dominant one of Regular Service. In Silversmithing, indeed, the amount of it is considerable owing to the existence both of subdivision and grading, and to the infrequency of indentures and even of the more binding kind of verbal agreement. In Bookbinding there is a class of business which lies midway between the semi-skilled machine production and the very highly-skilled hand-binding, namely general jobbing work and vellum-binding. It is what one might call "five-year" work, that is skilled work in which the normal period of Apprenticeship would be five years, but where there is also some migration. A similar state of affairs is found in some of the metal trades, notably in Ironfounding.

For the presence of conditions which particularly favour it is not necessary to the existence of Migration. Sometimes, indeed, they render its frequent use probable or even inevitable; but it can exist in their absence and, as in the case of House Building, can even play a very important part, when such special circumstances are found only in a modified form. Moreover, general industrial conditions favour its presence to some extent in almost every trade. The rigidly binding agreement is falling into disfavour and is being replaced largely by informal Regular Service. The latter leaves necessarily more loopholes for Migration than does the former, and so in various ways it has come to take a distinct place in such employments as mechanical engineering and art metal work. The thing can be done, and if the boy gets discontented or the firm's business slack, he moves, or is moved, on. Moreover, there are circum-

stances in which after a time his interests will really lie in going further afield, and some will enter a trade with the deliberate purpose of doing so.

Thus the area covered by this method is a wide one, and from various sources it gets a considerable proportion of boys to adopt it. For not only is it found where circumstances render it more or less necessary, but it is utilized by many lads who through their own or others' faults have failed to master their trade entirely by Service and have to learn it, or complete the learning of it, in this way. Except for plumbing and gas-fitting, in which Following-up prevails, it plays a big part in all the Building Trades. With a few exceptions, notably Upholstery, it is in even more frequent use in the wood-working and furniture group,<sup>1</sup> and in sawmills and French Polishing it appears to be predominant. Other instances of its importance are to be found in parts of the engineering industry, and in the making of leather goods. Finally, it is found in existence to a smaller extent even where Regular Service prevails, notably in silversmithing, ironfounding and jobbing bookbinding. Like the latter, in short, it is frequently important, and present almost everywhere. It is, further, a method that is growing in popularity.

<sup>1</sup> The following return of the proportions of boys employed in various ways in London and in the whole of the United Kingdom in the returns published in the Report into Earnings and Hours of Labour in the Building and Wood-working Trades in 1906 is interesting :—

|                                 | All Working Apprentices. |        | Full-Time Improvers. |       | Others.      |       | All Boys.         |        |                 |       |         |       |
|---------------------------------|--------------------------|--------|----------------------|-------|--------------|-------|-------------------|--------|-----------------|-------|---------|-------|
|                                 | Lon-<br>don.             | U.K.   | Lon-<br>don.         | U.K.  | Lon-<br>don. | U.K.  | Appren-<br>tices. |        | Im-<br>provers. |       | Others. |       |
| Building . . .                  | 151                      | 10,350 | 176                  | 1,493 | 291          | 1,844 | 236               | 12,019 | 409             | 2,258 | 489     | 2,489 |
| Cabinet-making,<br>etc. . . . . | 208                      | 2,488  | —                    | —     | 386          | 1,346 | 293               | 2,996  | —               | —     | 592     | 1,790 |
| Sawmilling, etc. . .            | 25                       | 1,452  | —                    | —     | 420          | 3,023 | 26                | 1,751  | —               | —     | 555     | 4,130 |

## CHAPTER VI.

### FOLLOWING-UP, OR LEARNING FOLLOWING UPON LABOURING.

Conditions leading to the Method of Following-Up—Brief Description of it—Apparent Overlapping with, and Real Difference from, Methods previously described—Tendency of Following-Up to create a Partial Blind Alley—Trades and Numbers of work-people affected—Organization of Work in them.

Plumbing—The Start—Work as a Mate—His Duties—Learning *about* the Trade—Work as an Improver—Illustrations—Frequency of Formal Apprenticeship in Plumbing—Comparison of Apprenticeship and Following-Up.

Conditions produced by Following-Up in this trade—Tendency to a Partial Blind Alley only slight—Mate's Work provides a permanent livelihood—Danger of Overstocking the trade greater—Probably a reality—Opposition of some Plumbers to mates who attempt to rise—Danger of producing ill-trained men—Possibility that capable boys will remain mates all their lives.

Following-Up among Smiths—Heaviness of Work reduces number of boys—Apprenticeship less common—Dangers of Method less marked than in Plumbing.

Following-Up where men and boys work in squads—Riveting—Method as working in Boiler-making—The Heater and the Carrier—Riveters recruited from the latter—Conditions of the work and training—Other trades recruited in this way—Training of the Platers.

Extent of Migration during Learning—Attempt of Unions to enforce five years' continuous service in a single firm—Trade a Partial Blind Alley, possessing a dual character as such—Tendency to a Reserve of Boy Labour—Other Branches of Rivetting.

Following-Up in Smaller Trades—Leather-Splitting: a marked Partial Blind Alley—Attempts to provide for those displaced—Wire-Rope Weaving—Glass-Blowing—Acquirement of Bricklaying by labourers—Resemblance of this to Following-Up apparent rather than real.

Summing-up, as to character of trades where Following-Up prevails and as to its dangers—Illustration from it of the need for a properly regulated scheme of training.

IN some trades the method of production requires that the skilled man shall have a helper or assistant definitely attached to him, and the tie between them is very close indeed, since the latter is put to serve a particular man and him only. In other cases a certain number of mechanics and assistants form a squad ; and frequently these men are engaged and dismissed at the same time. The plumber and his mate, the smith and his hammerman, look for jobs together, and a foreman would take on both if he took on either, as he would a squad of rivetters in Boilermaking, whilst a bricklayer and his labourer would usually be engaged as two separate individuals. Moreover the tie is a close one in another sense, namely, that the helper comes into such direct contact with the actual work that he can hardly fail to learn how it is all done, and can use this as a starting-point to get hold of the tools and so " follow-up " and acquire the trade. Many of the helpers are grown men, but a good proportion of them are youths, though not young boys, as the work is often too heavy for them.

Thus there grows up a third distinct method of learning a trade. It may be designated " Following-Up " or Learning following upon Labouring, and is roughly as follows. A boy or youth works with his man or squad for a number of years either as a labourer or helper. He is not there to learn. His business is to assist the man to do his own work. But in so doing, even if he does not actually handle the tools, he acquires and, if he has any capacity at all, can hardly help acquiring, a knowledge of their uses and of the processes and of the way in which they are carried out. Thus on the one hand he will probably get very little opportunity of actually doing a man's work, and on the other will obtain a clear view of the trade from the inside. Eventually, however, he finds an opportunity to get a start for himself as an improver. Then in his further progress he may stay in the same shop or he may have to change over and over again before he is finished. A Master Plumber summed up the process epigrammatically as " Bad Mate, Good Mate, Bad Plumber, Good Plumber " : and in this and other cases

where the method is found, even bound apprentices have to begin by serving the first few years of their time as mates to a Journeyman ; for in any case a period of mere assistance must nearly always come before that of actual work with the tools.

On the surface there may appear to be some overlapping between this and the two methods already described, and curiously enough Formal Apprenticeship is unusually common in one or two of these trades, more particularly in Plumbing. Apart from this, Following-Up begins with a long period of employment in a single firm, that is to say as a mate, and often after a start with the tools has been made, comes movement from firm to firm as an improver. Superficially, therefore, the process seems to be a combination of Service and Migration, varied by individual cases in which either the former is regular throughout or in which there is no period of continuous employment.

The two things, however, are really very different. Even the improver who is teaching himself or the youth who is working and learning is not in the position of a labourer or assistant to another person, but is actually using the tools, and acquiring by doing the work a certain part of the business of the mechanic. He and the apprentice are learning not only how it is done, but how to do it themselves. But the mate who is following-up is primarily there to assist and serve another and he is kept to it. In this sense, in short, the apprentice or improver is clearly a learner from the very beginning, whilst in Following-up a period of service as a mate or helper precedes the actual learning. In it, therefore, both the service and the migration are of a different order ; and *Following-up* or *Learning following upon Labouring* rightly stands out as a method by itself. The vital fact is this, that the boy or youth is there to assist the man. By so doing he puts himself in a position to learn later on, but not till then does he actually do so.

Under this method the number of boys or youths who are employed in a trade is apt to be greater than can find permanent occupation in it. Usually the proportion varies

from one assistant to one tradesman, up to two to three or occasionally one to three. Now even the latter, when it is a minimum required for the purpose of a trade and not a maximum to which employers are limited, introduces into it an excess of boys, whilst the others would cause the excess to be considerable. Individual occupations, however, are able to reduce or get rid of the surplus. Thus plumbers' mates and smiths' hammermen have a definite occupation which can best be classed as semi-skilled work; and many of them are grown men and only the residue youths attempting to learn. Again in other cases jobs can be provided later on in other parts of the factory for some of the assistants. Hence the surplus is often small when it might reasonably be expected to be large; but some of the trades which comprise this group are undeniably employing far more boys than they can permanently absorb.

This method is nothing like so common as Service or Migration. It is more or less confined to certain trades and is seldom found as a competing alternative outside of them. The number of workpeople affected is shown by the Census of 1901 to have been as follows:—

|   | County of London. | Outer <sup>1</sup> London. | Greater London. | Rest of England and Wales |
|---|-------------------|----------------------------|-----------------|---------------------------|
| Smiths and Strikers . . .                             | 8,113             | 4,619                      | 12,732          | 112,573                   |
| Plumbers and Mates . . .                              | 8,582             | 5,707                      | 14,289          | 50,679                    |
| Gasfitters and Mates . . .                            | 5,027             | 2,720                      | 7,747           | 9,369                     |
| Railway Engine Drivers,<br>Stokers and Cleaners . . . | 4,697             | 4,679                      | 9,376           | 60,307                    |
| Total . . . . .                                       | 26,419            | 17,725                     | 44,144          | 232,928                   |

In addition to the above there are the boilermakers and the glass-blowers. A separate return for the former is not available for London in the Census figures of 1911. In 1901 there were about 3,300 of them in the County of London and

<sup>1</sup> Partly estimated: Urban Districts only.

about 5,600 in Greater London. Nor is a separate return given for the glass-blowers, but they form the great bulk of the London glass workers, of whom, according to the last Census, there were 3,299 in the County of London. For three smaller processes, those of tankmakers, leather splitters, and wire rope weavers, separate figures were not given in either Census.

The last three groups only employ a small number of workers, the tankmakers being estimated at from 250 to 300 by Mr. Charles Booth in 1893, and probably do not much exceed that number now. The leather splitters likewise are probably not more than a few hundreds, and the wire-rope weavers are but a small portion of the 1,500 odd wire-workers shown to be employed in London. The means by which in Bakeries men rise from being Third Hands to be Second and eventually First Hands, and those by which bricklayers' labourers acquire bricklaying, bear some resemblance to "Following-Up"; but for reasons that will be given later they cannot rightly be classed with it.

The actual organization of the work varies. Most frequently men act in pairs—smiths and hammermen,<sup>1</sup> plumbers and mates, leather splitters and assistants. In Boiler and Tank Making, however, and in any form of rivetting, squads of four or five are usual, composed of one or two rivetters, one holder-up, and two boys, or in some cases only one. Glass-Blowing is carried out by Chairs of four, of which the junior members are, or may be, boys, and in Wire-Rope Weaving the man manages the machine, with one or two of them as "watchers-out." The different methods of working vary considerably, and for this reason a detailed description of them may be helpful.

On the whole the operation of the system is seen most clearly in the case of the plumber, to which that of the gas-fitter bears considerable resemblance, except that the work of the latter requires that the mate shall himself sometimes use the tools. In both the mate is a semi-skilled man, so

<sup>1</sup> In the larger works there are often several hammermen to one fire, but this is not common in London.

that a boy has to make himself reasonably competent as such before he can get taken on in the better firms. Again, the work is mostly heavy, and so in the bigger ones a start before sixteen or seventeen is unlikely. It can be made earlier, however, in some of the small jobbing shops where only lighter work is done and less skill and knowledge are required in the mate. These facts also account for the disfavour with which young apprentices are, not unnaturally, regarded by some of the plumbers. The man who has only an "apprentice boy" of fourteen, instead of a grown man, is very much more handicapped than one who has a youth of seventeen or eighteen, even though the latter may not be fully efficient.

First of all, therefore, the boy or youth must acquire sufficient competence as a mate to enable him to get employment as such in an ordinary firm. To do this he gets a relative or a friend to put him up to things a bit, or goes into a small shop as odd boy where he knocks about for a year or two and, from sweeping up, comes to help the men generally, and later, if the work is light and easy, to serve one of them. At sixteen or seventeen he goes, if he can, to a big firm and gets taken on as a mate. He will start there at from 3*d.* or 3½*d.* up to 4*d.* or 5*d.* an hour and will reach the full mate's wage (7*d.* per hour) after about two years.

His work is now varied and requires both strength and intelligence. He has to hold the tools and pass each one as required—in itself no light task owing to their number and variety. Certain of them, those used for wiping, for instance, he has to treat in the fire and keep at the right heat—an important and difficult matter. When dents in the piping are being straightened he has to help draw the mandrils and bobbins through them, and to hold the pipes whilst they are being bent by the plumber. When brass is used he has to prepare it for receiving the solder, and when the piping is being fitted on the building, he has to carry it and hold it in position.

In doing his work the ordinary mate will not have to use the tools at all, but he does require a certain amount of

skill. In its course, moreover, he can hardly help getting an intimate knowledge of the tools and their uses and of how it is all being done, besides carrying out certain preliminary processes. Short of actually doing a mechanic's work, therefore, he learns all about the trade, and indeed may get a thorough insight into it. Thus if his plumber is a good man, he is better served so far than many an apprentice elsewhere who goes straight to the bench. In any case a smart chap can hardly help learning enough to enable him to go and practise the actual processes for himself in a Trade School, which he should do whilst he is still working as a mate, and during this time many will also acquire a set of tools with which to start as improvers. Many jobs, indeed, like the "wiping of joints," can be carried out in the Schools, so that at them the mate can practise for himself of an evening some of the things which he has seen his plumber do during the day. Thus one foreman said: "You can see lads at the Technical Schools any evening of the week doing ordinary plumbers' work, wiping joints, beating out sheet-lead, and so on." This, of course, is only a beginning, and some years of actual work in the shop will be required to attain proficiency; but it does make a start easier. Another advantage possessed by learners in plumbing consists in the shortness of the hours recognized in the London District, namely forty-seven in summer and forty-four in winter; and these give them almost exceptional opportunities for attendance at classes.

Thus the time comes when the mate feels competent to start for himself, and so soon as an opportunity occurs, he goes out and takes his first job as an improver. He now has a mate of his own. Usually he will proceed to another firm, as many plumbers do not look with favour on their mates taking up their work. Often a small shop doing general repairs or light work, or else one that is specializing on certain branches, is the first venture. Either of these can usually find room for an improver. He is taken on at a price and put off when not wanted or not able to earn it. Some work their way up to their full money in their first improver's

job. Others will make several changes, and learn a little more at each place. They may make competent plumbers, or they may not, but they seldom or never go back to a mate's job. And as already stated, the method of learning is much the same, even where there is an Apprenticeship or Agreement. The apprentice will work as a mate for some years and will only be given the tools in his last year or two.

It may again be worth while to quote a few industrial histories.

Aristides<sup>1</sup> (aged 23) is the son of a plumber. He went into the trade because he himself took a fancy for it, as his father had no special idea of putting him to it. He began with a year as office boy in a plumbing firm at 8s. a week, and for the next year worked with it for 12s. as plumber's boy. He then moved to another shop where he got 4*d.* per hour, and was there for fifteen months. After this he worked for three months at 5*d.* When this job was finished he was out for six weeks, and then got taken on under the L.C.C. as mate to a Union workman at 7*d.* per hour—the full rate for a mate. This man would not allow him any chance to learn, and if he picked up the tools told him to put them down. What he did, however, was to see how each job was done and then “come up here,”<sup>2</sup> and practise it. He found that Non-Society men were the same. They would let him do nothing but wait upon them. After nearly two years he lost this job through spraining his ankle, and then got one or two short ones as a mate in small firms. Then he started as an improver. His first job produced 9*d.* per hour. He was dismissed for slackness, and after a fortnight got another job for 10*d.* per hour. In the former both the walking foreman and the foreman of the job gave him a little help. In one of these firms there were five other improvers like himself, and about half of the mates were young men who were not getting the full money, and several of them were trying to learn the trade. The second of these jobs came to an end after three months. Since then he has worked

<sup>1</sup> The names, of course, are imaginary.

<sup>2</sup> I.e., to the Trade School.

on temporary jobs for Builders who do not keep a plumber regularly employed, usually having a week or two out of work in between. In one of these he worked for six months at  $10\frac{1}{2}d.$  per hour, and in another, lasting about the same time, he got the full money,  $11d.$  When I saw him he was still doing this sort of work, as he was unable to get regular employment.

Brasidas<sup>1</sup> left School at  $14\frac{1}{2}$ . His father was at one time a carpenter and then a policeman, but has since retired. He began with three years in a Tramway Engineer's Office, hoping to become a clerk. He then tried for a position to be trained as a Sanitary Inspector, but failed to obtain it, and was advised to become a plumber and work his way up to it. When I saw him he had been six years at this, five as a mate and one as an improver. He has worked for five shops altogether and moved backwards and forwards between them. He began with eighteen months with a Sanitary Engineering firm for  $4d.$  per hour and was dismissed for slackness. After three weeks he got a job at  $5d.$  per hour and in time raised his wages first to  $6d.$  and then to  $7d.$  He was usually out for about a fortnight at the end of each job. In his first improver's place he got  $8d.$  and was there for three months, but in his next he accepted  $6\frac{1}{2}d.$  on the understanding that he should be taught estimating and measuring, and when I saw him had worked there regularly for nine months. The agreement was being pretty well observed.

Cincinnatus,<sup>1</sup> after nine years at the trade, is still a mate. His father is a gardener. He left school at fourteen. It had always been his ambition to become a plumber, and a mate's job was the first that presented itself. Business, however, is so bad he would change if he could, though he likes the work. He was four years in his first job for a Master Builder and Plumber and worked as mate to his employer's son. He was the only boy there. His wages for each of the four years were  $8s.$ ,  $10s.6d.$ ,  $13s.$  and  $16s.$  respectively, and he was given the tools and the chance to do the work as

<sup>1</sup> The names are, of course, imaginary.

opportunity offered, there being an understanding to that effect. With them he got regular employment. He always had the ambition to get into a big shop, and eventually obtained a job in the one where he was when I saw him. He had been there nearly five years. For the first three he had worked for the firm in the country, and after that came back to London. For about twelve months he was employed irregularly by them, being continually put off and losing about thirteen weeks out of the fifty-two. He started at  $4\frac{1}{2}d.$  per hour and when I saw him was getting  $5\frac{1}{2}d.$ , which is not the full mate's money. He finds he has been very much kept back, and that the men are mostly hostile to those who, like himself, are trying to get into the trade in this way. Some men will do all they can to prevent them doing so, whilst the preference given to the sons of the plumbers employed by the firm, or to those who have influence behind them, keeps the others back. When I saw him he was intending to try his luck with the foreman to get a start as an improver, and to go elsewhere if he failed. There were some twenty improvers employed by this firm.

Curiously enough Plumbing shows a greater tendency towards Formal Apprenticeship than any other branch of the Building Trades. The growing realization of the needs of public health and sound sanitation has led to special attention being paid to the question of the training of plumbers. This has resulted in movements for the Registration of Plumbers and for the revival of Apprenticeship among them and in both of them the Plumbers' Company has been active. On the other hand the method of Following-Up, the organization of the trade, the short working hours and the position of the Trade Schools render indentures to some extent less necessary. The long period as a mate, too, keeps the learner under better control during his earlier years at the time when such control is most necessary, and so checks the tendency to run wild that is often found among improvers. Moreover for the first few years of his time a lad's work will be much the same, whether he is an apprentice or not. From the learner's point of view also, the advantages of being bound are less

than they are elsewhere. "Is it to be expected that a smart young chap shall take lower wages as an apprentice boy and perhaps pay a premium, when by working as a mate and using the Technical Schools, he can learn just as well and get better money while doing it?" In other words Following-up is in many ways an efficient alternative to Apprenticeship, but even here the value of a definite and regular engagement to teach must not be lost sight of.

This value is further increased, when the question of recruiting, as well as that of the actual teaching, is considered; for the laying down of definite conditions of service makes it possible to regulate more quickly and successfully the flow of labour into the trade. With mates it is often difficult to know whether they will or will not attempt to become plumbers, and thus more may try to do so than it can hold, since the number of young mates cannot be limited so easily as that of apprentices. This fear, often a justifiable one, is largely responsible for that hostility which some plumbers display towards the efforts of their mates to better themselves, and so prevents the latter from getting the help and advice which they require. Indirectly, therefore, Following-up may for these reasons result in inefficient training in cases where Apprenticeship or Service would not. Thirdly, it does cause some failures which with a regular agreement might never occur. The boy or youth who has to stand alone and teach himself does require a higher level of ability than the one under a contract, and this is one of the reasons why the value of the latter may be so great.

What is needed, therefore, is some method which, without closing the alternative avenue, shall extend the number of contracts of Apprenticeship or other definite agreements, and regulate the influx into the trade; some method, in short, by which, at a certain stage and on fulfilling certain conditions, a youth who is following-up shall be definitely recognized as a learner. At present Following-up is far more common than Apprenticeship in the Building and Contracting firms and with most of the Builders' Plumbers, whilst the latter prevails as a rule among the

smaller firms, the Sanitary Engineers and similar businesses.

Finally the question arises how far those who enter the trade by this means can get permanent employment at it, and whether it is actually a Partial Blind Alley, as it would be if all the mates were actual as well as potential learners. Allowance must be made, however, for the facts that a considerable proportion of the mates are grown men who are likely to remain as they are, and that the occupation of a mate is a semi-skilled one requiring considerable strength, and thus provides a man's livelihood. Hence, if the proportion of grown mates were sufficiently large, there would be room for all the youths who desired to do so to enter the trade as skilled plumbers, without any danger of overstocking.

A study of recent censuses suggests that normally there is some, though not a marked, surplus of youths between 17 and 20; but a greater and more real danger is that of an excess of adult men. Many of the younger, and some of the older, mates aim at making themselves plumbers, and even if they fail to become competent, seldom go back to their old position, so that the trade contains a number of inferior mechanics who are "good mates spoilt." Further there is no real check on the number who try to enter it, and so the presence of many young mates may mean more potential plumbers than it can hold. Again, when there is an excess in the upper grade, a similar one is likely to result in the lower, since each plumber must have his mate. Thus instead of a proportion of the younger men being turned off altogether at an early age, there is the danger of a more or less general shortage of employment for all. The returns of the Plumbers' Union in London have for the last ten years shown an excessive rate of unemployment in good years and bad alike. Compared with the rest of the Building Trades, Plumbing is not very highly seasonal, so that this high percentage of unemployment is the more remarkable. No doubt it is due in part to other causes, but, nevertheless, the tendency to overstock the trade is largely responsible for it.

Moreover Following-up has undoubtedly helped to produce a class of half-trained and casually employed plumbers, though this result is not so serious as it sometimes is in the case of Migration. The ever-present danger of overstocking has led some of the men to attempt to keep back the mates, and has sometimes prevented all but the most persistent from learning the work properly. Secondly, the special chances which it still provides have called into it a number of men who lack the capacity to acquire it, thus adding to the number of "good mates gone wrong" who only make inefficient mechanics. Finally the long preliminary period of labouring renders them less able and less willing to leave it than the younger boys who spend their youth about some other industries.

Thus the trade as a whole shows a comparatively slight tendency to turn off boy labour at the close of adolescence, but is apt to suffer from a general over-supply of adults, accompanied frequently by the growth of a class of casual, because inefficiently taught, workmen. In the opposite direction there is a danger of keeping in its lower ranks those who are fit for something better. At present boys of real ability may remain mates all their lives from one cause or another, real lack of opportunity, want of confidence in themselves, opposition from the journeymen and so on. Entering the trade and finding their way barred, they either fear to leave it or are attracted by the certainty that is still theirs, and thus there is a further waste of good material. In other words, the trade may not act directly as a Blind Alley, but appears to produce other consequences that are no less harmful.

With the smiths conditions are very similar, but the undesirable results of Following-up are less in evidence. Their trade has three chief branches, those of Engineers', Builders', and Coach Smiths', between which there does not appear to be much interchange, though the methods of working are similar. Methods of teaching are much the same as with plumbers, except that Apprenticeships and other definite engagements are less common. They are

found mostly in some of the bigger shops, where Regular Service of some kind is general in all departments. Thus the Ship-Repairing firms have a rigidly interpreted informal agreement. Normally, youths serve for some years as hammermen, and during this time may learn vice-work as well. Then they get on to a "small fire" as improvers, probably in another firm, and work alone at it without an assistant. An influence hostile to Apprenticeship or even Regular Service, which is absent in the case of plumbing, is that the teaching of an apprentice often means the laying down of an extra fire, which in many cases is impossible. The big shops are often able to keep special fires to which a lad can be raised, but the small ones cannot do this, and the only alternative would be to dismiss a competent man to make room for the learner. Thus, not only are fewer apprentices taken, but a young hammerman is more likely to have to move into a new firm before he can get a start as an improver.

Again, Smithing is a trade in which the question of strength is of even greater importance than in Plumbing, and hence young boys are not sought after. Thus they must wait till they are seventeen or eighteen, or go to a place where light work is done. "Boys are of no use to me," said one foreman; "it wants a strong chap of eighteen or nineteen to manage the hammers. So I take on a young fellow of that age at about 3*d.* an hour, according to what he is worth. If he has been at a small firm where they take boys, which is best, he will get 5*d.* or so. Many little shops employ them and pay them a few shillings a week, so that this represents a fine rise to them." The case of the young turner's improver described in a previous chapter is another illustration of this process. The hammerman is in the same close contact with the work as the plumber's mate, and sometimes has the further advantage of getting certain small parts of it to do for himself.

The dangers of Partial Blind Alley employment appear to be far less here, for the Census returns shows a deficiency both of boys and youths. Again, the strength required

by the hammermen reduces the proportion of youths among them who have ambitions to learn and increases that of grown men who find a permanent livelihood at hammering. Nor is there any definite evidence that this trade as a whole contains an excess either of smiths or hammermen. The greatest dangers are the growth, as with the plumbers, of a class of half-taught mechanics, and the possibility that some who are fit for a smith's job will remain assistants all their lives.

Learning by "Following-up," however, is not confined to occupations in which a man and a boy work together in a pair. On the contrary, it is from Boilermaking, in which they are employed in squads of four or five, that the name is taken. In them the "rivet boys" who serve the men are said to "follow-up the trade." The method applies chiefly to Rivetting and Holding-up, many platers and angle-smiths learning their business in other ways. Nor is riveters' work confined to the actual making of boilers. Their Union, the Boilermakers' and Iron and Steel Shipbuilders' Society, covers boilermaking, iron and steel shipbuilding, and bridge, girder, pontoon, tank and gasometer making. And in nearly all of these the rivetter is employed. The method of Following-up, however, is most important in reference to Boiler and Tank Making. The former employs angle-smith, plater, rivetter, caulker and holder-up, and also a semi-skilled class of drillers, but in the London repair work the same person often acts both as rivetter and caulker.

In Rivetting the "squad" normally consists of five persons—two riveters, one holder-up, and two boys (a heater and a carrier). The former drive in the rivets which are brought to them red-hot from the fire by the boys, and the holder-up holds the plates in position during the process. Of the boys the younger heats the rivets at the fire, and the older one carries them from it to the boiler or tank. This is the normal number in Boilermaking. In the lighter tank work the squad consists as a rule of three only, rivetter, holder-up and boy. Again, in some cases the use of the

hydraulic blast displaces the boy at the fire, but where, as in ship-repairing, the rivets have to be carried some distance, several carriers may be needed to each squad.

The rivet-heater is usually a boy of from fourteen to sixteen, who starts at the earlier age at 8s. or 9s. a week. At sixteen he either becomes a carrier or leaves the trade, and this proves the first crisis in his fate. If he passes through it safely and becomes a carrier at 3s. a day, his chances of learning the business are increased, though all the carriers do not do so. The rule of the Boilermakers' Society requires apprentices to enter it not later than sixteen, and in London, where they are very few, the taking of a carrier's job marks a definite step up the ladder, though as yet the position is not quite assured.

The lad's duty now consists in taking the rivets from the fire and placing them in the holes in the plates already made by the drillers for the purpose. This is responsible work, since it is important to keep the rivets at the right heat and get them in position smartly. A good or bad carrier may, indeed, involve an enormous difference in the amount of labour entailed on the rivetter by a day's work. Hence some of them earn very good money, getting 3s. a day after a short time, and even more on piece-work. It is from this job, therefore, that a boy follows-up the trade. The Union rules lay it down that he shall serve for five years continuously, starting not later than sixteen, and that he may be allowed a year more to get his full money in the shop in which he is working ; and they make special provision for cases where his time does not end until after he is twenty-one.

There is not here, as with smiths and plumbers, the same definite change from the position of assistant to that of improver. The carrier's position as a learner gets recognized sooner or later, and he is given opportunities to learn. If he is definitely apprenticed or the son of a member of the Union, the men lay themselves out to see that he gets taught, whilst the Society itself appears to take special care of its young workers. Strength also plays a very important part in this trade, and as his physical powers develop, a boy can

start on a man's work with comparative ease. So he asks the holder-up to give him a try, and, if it is convenient, he gets a chance to do a bit of this. Or when caulking and chipping are being done, the foreman lets him have the tools and go round with the caulkers. So he gradually comes to learn the business, or "gets the tools into his hands" as the phrase is, and when a vacancy occurs, either as holder-up or second rivetter, he is put to fill it.

Moreover, the rules of the trade allow the learner or apprentice not merely to follow it up in this way to the extent of becoming a holder-up or a rivetter, but to progress from one job to another till he reaches the highest positions. Thus from holding-up he can rise to be first a plater and finally an angle-smith. Others will go straight to rivetting without first working as holders-up, whilst the less capable never progress beyond this, the lowest of the skilled branches of the trade, in which they get 39s. a week, as against the 45s. and 48s. respectively of the rivetters and platers. Angle-smiths get even more.

Unlike the rivetters, however, the platers do not acquire the trade only by this method. Their duty is to mark off the plates, see to the cutting and shaping of them, and place them in position for the rivetters: and to some extent they are recruited from boys who have worked with them from the very beginning. These are taken on to make themselves generally useful, often with the idea of learning later on. If so, they are usually put to assist the marker-off, and after a few years the foreman takes them under his own control and gives them small jobs of cutting and shaping to do, and after this they gradually acquire the trade. They are learning, therefore, not by Following-up, but by informal Regular Service, and a good proportion of London platers have started in this way. Similarly, the small and select body of angle-smiths are partly recruited directly.

Migration from one firm to another during the time the trade is being learnt is explicitly forbidden by the rules of the Society, which lay down five years' continuous service as an apprentice and in a single firm. After its conclusion

a further year in which to get full money is given to those whose time commenced before they were sixteen, but not to those who started later than this. For the latter special regulations have been made.

These rules appear to be strictly carried out in the Northern Shipyards, but except perhaps with platers, it is doubtful if the conditions of a repairing centre permit of their enforcement in London. Continuous work for five years, with some allowance for short stoppages, is indeed more or less general, but service in a single firm cannot always be adhered to. Sometimes insistence upon it compels carriers to give up the attempt to learn, but in other cases they contrive to do so whilst working in different yards, and it would appear that service in a single squad is admitted as a substitute for service in a single yard. Conditions of work make changes from one firm to another a necessity for the men themselves, and therefore for the boys who work with them. Moreover, apart from this, there appears to be a good deal of casual migration and picking up of the trade in one firm after another. One foreman said that his experience was that after about five years from the time they started as carriers, all who showed sufficient competence were "recognized as apprentices," and given a certain period to get their full money, and that the boys appear to be well looked after by the Union.

The trade is undeniably a Partial Blind Alley, more particularly when the squad has a full complement of two boys to three men. As such, however, it possesses a peculiar double character, some having to leave it as early as sixteen and others not until some years later. In the first place a large number are employed from fourteen till about sixteen as heaters, and from them the carriers are recruited. But all of the former cannot be absorbed, and a large proportion have to seek other employment. At this age such is not very difficult to obtain, but the character of the rivet-heater's job does not appear to improve his chances of good work elsewhere.

Thus, a preliminary weeding-out of the boys is made, and those who remain become carriers ; but even so it is not possible for all of them to stay permanently in the trade, though the proportion who do so is very much larger than in the case of the heaters. The progression of rivetters to plating somewhat increases the number of openings, but against this have to be set the cases where a squad requires more than one carrier. The experience of different foremen varies. Some are able to find room for practically all their carriers. Others have a marked excess over and above the number that they can find room for. Taken as a whole, there appears to be a small excess, and some of them have to leave the trade. A few of those who do, get semi-skilled work as drillers.

Finally, the irregular character of much of the work has the inevitable result of collecting a reserve of boy labour. Partly this is due to the action of spells of unemployment in spoiling a boy's chances of learning. Short periods of it do not much militate against him, but long-continued irregularity often makes it practically impossible to acquire the trade. Moreover, some firms get a number of lads waiting round their gates to be taken on when there is a rush, owing to the attractions of casual labour and high pay. Thus not only does the trade require more boys to do its business than it can absorb into its ranks as men, but it gets more than are really necessary to carry out the work.

The other branches of rivetting do not need detailed treatment, since the general conditions remain much the same. With bridge-builders jobs are usually of longer duration, and the conditions approximate rather to those of the building trades in which changes of job often occur only after a lapse of months. In the lighter Tank-making, squads appear to consist of two men and one boy only, and many lads used to follow their fathers into it, and these obtained the best chances. It has, however, been largely revolutionized by the development of machine-rivetting, which has not only reduced the amount of labour required, but has brought it down to the level of a semi-skilled process. Moreover,

in machine-rivetting, the rivet boy as such is not needed.

These are some of the chief trades in which the method of Following-up prevails, and illustrate the forms it takes, according as men and boys work together in pairs or in squads. But it is worth while to consider some of the smaller processes which adopt the system, since in them the characteristics of a Partial Blind Alley are usually very marked. That known as Leather-Splitting, which is applied to sheep's pelts and other light hides, may first be dealt with. To begin with, these pass through the lime pits and then through the hands of the flesher.<sup>1</sup> After this the inner and outer pelt have to be separated, or in the technical phrase, split. This used formerly to be done by hand, and was a very highly-skilled process. It is now done upon a machine and requires considerably less skill, though good money can be made at it. Each machine is worked by a man assisted by a youth. The former puts in the pelt. This requires great care and accuracy, as otherwise it will be spoilt, and the work has also to be done very quickly. The youth stands at the other side to pull out the separate pieces after they have passed through. He also has to pay great attention to his job, though it is not a skilled one.<sup>2</sup>

He starts at about sixteen years of age, and is paid either at once, or very shortly, at the rate of 4*d.* per hour, but will not get much more until he leaves this job and becomes a splitter, and grown men occasionally do the work. Thus the boy's position is not dissimilar to that of the plumber's mate, but after being raised to the front of the machine he would soon be able to do the man's job. He would, however, go more slowly for some time and, being paid piece-rates, would earn less.

Some firms make a great effort to keep on as many of their boys as possible, by promoting one or other of them whenever a vacancy occurs on a machine or a new one is laid down, but as the London trade is not expanding rapidly,

<sup>1</sup> See Chap. iv.

<sup>2</sup> For a general description of the Manufacture of light leather see Chap. vii.

the latter is not frequent. Hence the process is to a rather marked extent a Partial Blind Alley. The job itself lasts longer than many other blind alleys, however, and the wage to be earned is considerably higher. Hence a youth can afford to stay in it till as late as twenty-two or twenty-three, and many do so in the hope of a rise. As, therefore, each boy stays in it five or six years, or even longer, the excess is correspondingly reduced. Secondly, the factories in which splitting is carried out contain a number of semi-skilled processes into which those who cannot find places as splitters might be drafted. But though some of the employers fill such vacancies by promoting boys from other departments, I was not able to get definite evidence that this was done in the case of the splitters' helpers; and in any case, when all allowance is made, not all of them can look for permanent employment in the same factory or even in any parts of the leather trade.

Similar conditions exist in wire-rope weaving, whose processes and methods somewhat resemble those of the textile trades. The wire is first wound on to specially made bobbins, and then woven on small machines into strands, and these strands on larger ones into a rope. This is then taken into another shop to be finished. The finishing is essentially a skilled process, whilst the weavers earn up to 6s. a day on the biggest machines.

Boys are employed in considerable numbers, coming into the works at about fifteen years of age to carry out the preliminary process of winding the wire on to the bobbins. The next step is to serve as look-out boy on the bigger machines, to call the minder's attention to any flaw or breakage in the wire. Many more are employed than can find places as men, and a good number drift away to other jobs or show no aptitude for this one. An attempt is usually made to find room for those who do. They continue at "looking-out" for some time, and are then put to work a smaller machine. In one large firm they are sent into a separate room where there is a man told off to teach them, and those who have got into it may be taken to have

started definitely to learn the business. They would then wait their turn to get on to a bigger machine. In this firm also some of the learners in the finishing department appear to have been selected from among the look-out boys. This, and the fact that every machine does not require a boy, somewhat reduces the excess, which is nevertheless admitted to be considerable.

Another small industry is that of Glass-Blowing. Here the work is usually done by a "chair" of four persons, composed of the maker, the most skilled man, two blowers or "servitors," and a boy. In some of the best qualities an additional man, called a foot-maker, is also employed. The boy starts making himself generally useful, and gradually rises to do the blowing, and sometimes from that to be a maker. Whether apprenticed or not, he begins as in other trades belonging to this group by being told off definitely to assist the other men. The number of learners or apprentices is strictly limited by the rules of the men's Union, and so it is not every boy employed in a "chair" who can enter the trade, but those who are taught learn by "following-up" from one position to another.

This practically concludes the account of the trades which definitely belong to this group; but the method of acquiring bricklaying resembles in so many ways that of Following-up that it is worth considering here, the more so as the numbers affected are large. Thus in 1911 bricklayers and bricklayers' labourers numbered about 15,000 in the County of London and over 28,000 in Greater London, and these totals still showed a considerable drop compared with 1901. Separate returns have not yet been given for bricklayers and labourers in the last census except in a few instances, but in 1901 the proportions in London were about 6 of the former to 5 of the latter.

In this trade the provincial influx is large, and it is mainly recruited from the younger labourers who obtain a knowledge of the simpler processes by observation, and then get hold of a trowel and start to lay bricks. Many of them have come in from agricultural districts, where

they may have done some rough brick or stone laying, and possess ambitions above those of the ordinary town labourer.

The resemblance to the method of Following-up lies in this, that, by working as a labourer, serving a bricklayer, a man or boy gets to know how to handle his trowel and how to do the easier parts. Much bricklaying is very simple work indeed, and in cheap suburban building or on some large plain job, an intelligent man can very easily do it and continue to do it for some time. If he comes to something more difficult, or the contracts end, he gets sacked and goes off to find another place, and improves his knowledge a little in each situation till he can do all the ordinary work. Finer processes, such as gauge work and the cutting of cornices and arches, cannot be learnt in this way, but a Trade School will enable him to get an insight into them. The Bricklayers' Society, indeed, and many of the workmen look with strong disapproval on this means of learning, so that the would-be bricklayer has to go into small firms or suburban districts, or wherever the Union influence is not strong.

Nevertheless the real resemblance to the method of Following-up is but slight. The labourer often serves a single bricklayer, but is not attached to him in the way that a mate is to his plumber, nor are they, as a rule, engaged and dismissed in pairs. Thus, the bricklayer's labourer is occupied running up and down a ladder with a hod, mixing mortar, and so on. He does not come into very close contact with the actual work, nor does he, like the plumber's improver, start with a detailed knowledge of what all the processes of the trade are and how they ought to be done. He has simply seen how the simplest and easiest work is carried out, and when he begins to lay bricks, he has only the same sort of knowledge, though rather more of it, with which the joiner's glue-boy starts at the bench. His position, therefore, is rather that of the promoted shop or errand boy. He is assisted, however, by the easiness of the simpler kinds of bricklaying and by the

amount of cheap building that is done, in which builders often prefer a young, energetic chap who will get through the work quickly, if very roughly, and will be prepared to take wages little better than those of a labourer.

Moreover, bricklaying is also, though not very often, acquired by more normal methods. There are occasional Apprenticeships, and boys engaged about the building pick up the trade and work their way up, sometimes in the same firm, and sometimes by moving about as improvers. This is really what the labourers are doing. They are not following up the trade, but are learning it by migration after a late start. Nearly all of them are young men, and it should be added that of those who learn in this way many fail to become efficient bricklayers.

To sum up, therefore, the method of Following-up applies to a group of occupations nearly all of which are skilled, though one or two are near the border-line that divides the skilled from the semi-skilled. It includes several large trades and a few smaller ones, and its salient feature is the long preliminary service of the helper who, after this, raises himself to the position of a tradesman. The method is liable to danger from two alternative sources. Either it may create a Partial Blind Alley, or it may cause a trade to become overstocked owing to the number of helpers who have attempted to rise. Sometimes both these evils are found in existence side by side in the same trade, and at others, thanks to certain modifying conditions, they are both avoided. Other difficulties also arise. The helper, being a semi-skilled worker, has a definite occupation before him, even if he does not become a tradesman, but he may be fit for something better and yet never be anything more than an assistant.

This group of trades, moreover, illustrates very well the difference between the old technical idea of an Indentured Apprenticeship and its underlying meaning. The former may even be inapplicable to some of them, though in others indentures are by no means unusual. In any case, many of them can be, and are, quite successfully learnt without a

definite binding, or even without any kind of agreement at all. But the underlying meaning of Apprenticeship comprises the systematic regulation and control of the teaching, of the teacher, and of the taught. It includes the right choice of a trade, the control over the conditions of instruction, and the after-care of the boys themselves. In this sense Following-up still requires an Apprenticeship System : and in some ways its special characteristics make the need greater and not less than it is elsewhere. Such, for instance, is the result of the tendency to a Partial Blind Alley, and the frequent absence of an effective control by the employer. Similar arguments also hold good of Migration. Indeed, the more informal are the conditions of employment and learning, the greater is the need of organization. In the form, therefore, of a regulated and organized scheme of teaching, suited to modern needs and varying according to the requirements of different industries, the Apprenticeship System is eternal.

## CHAPTER VII.

### THE PICKING UP OF SEMI-SKILLED WORK.

Semi-Skilled Labour an intermediate grade—Definition of it—How it is learnt?—Its Four Classes—*First Class*—Semi-Skilled Position due to Specialization of Processes—Method of Teaching—Three Forms taken by it—Examples, the Factory Boot Trade—Small number of young boys employed—Publishers' Bookbinding—The Engineering Trades, heavy and light—Conditions producing this class less frequent in London than elsewhere—Other instances—High Skill required within a narrow limit—*Second Class*—A moderate level of all round skill—As a result of the natural character of a trade—Carmen—Navvies—Paviours—Printers' Warehousemen and Cutters.—As a result of only acquiring part of a trade—Due to strictly limited demand for higher-grade labour—Coach Painting—Due to failure to learn the whole—House Painting. *Third Class*—Considerable Care and Responsibility involved—Some manual skill also required—Scaffolders—Stationary Engine Drivers and Stokers—Crane-men—Little or no manual skill required—Labourers in Chemical Works—*Fourth Class*—Mates or Assistants of Mechanics—Summary.

Question whether general level of skill has decreased.—Reasons for holding that it has not—Influence of Semi-Skilled Labour, especially upon Boy Labour Problem—Late Age at which it is entered—It is permanent and easy to acquire—Definite Livelihood provided by it—Its capacity to meet in part the difficulties of Blind Abbey employment—Absorption of surplus boys in semi-skilled work—Done in a single Factory, as illustrated from the Manufacture of Light Leather—Dangers of Semi-Skilled Labour—Liable to encourage drifting and failure to learn—And to keep boys who are fit for something better—Need for Organization to embrace both skilled and semi-skilled labour and contrived to meet the special difficulties of both.

BETWEEN the mechanic and the unskilled labourer there is an intermediate class of workmen. To this the name of semi-skilled is given and modern developments of industry cause it to have a steadily increasing importance. It takes

a variety of forms and on the whole is growing at the expense, both of the grade above and of the grade below it. It introduces into the question of Industrial Training problems and difficulties which differ somewhat from those which we have hitherto been considering.

It may be worth while to return for a moment to the definitions given in an earlier chapter. According to these, skilled work consists of all employments that "require a long period of training, whether this is obtained under a definite contract or agreement and in a single firm, or whether without any such agreement the worker is teaching himself his business in one or more firms." Again unskilled labour "only possesses the minimum of skill and knowledge and therefore neither requires nor receives any definite period of training. Such knowledge as distinguishes a good from an inefficient unskilled labourer can be sufficiently acquired by practice alone." This class, therefore, will not need definite treatment in reference to the training actually given to it, whilst semi-skilled labour will. For it "includes those trades and processes which do not need a long period of education, but can be acquired in a comparatively short time. Nevertheless they are distinguished from the third (unskilled) class by the moderate level of knowledge, skill and power that they require." Thus it is often possible to learn to do the actual work in a short time, but afterwards considerable practice is still necessary in order to obtain the speed and the accuracy of the adult worker. The pace of a youth is less and he is more liable to spoil what he does.<sup>1</sup>

To the teaching of this grade, therefore, the term "picking-

<sup>1</sup> The following definition of a semi-skilled workman was given by Sir Benjamin Browne in his evidence before the Poor Law Commission: "The semi-skilled man is a man who works a machine or does something of that sort, like the man who strikes for the blacksmith. He is a man who would not have to serve an apprenticeship, but he has picked up a certain amount of special skill which makes him worth more than his neighbour for the special work. In that class you include coalminers and navvies and all those men." (Appendix, Vol. VIII. Question 86298. November 26, 1907).

up " can conveniently be applied. There is little regular teaching, nor does a youth take a long period to acquire his work, even allowing for what he spends in perfecting himself at it. When he is too old for a boy's job, or wants more money, or sees a chance to better himself, he gets on to a new process and " picks that up." Further the recruiting of these occupations is not confined to boys and youths, but, in factory employments especially, use is also made of adult labourers, particularly when considerable care, strength, or sense of responsibility is required. Again certain kinds of work enable those who follow them to take up some semi-skilled job. Thus Scaffolding is largely the monopoly of sailors; soldiers sometimes have advantages for qualifying as carmen, and the numerous semi-skilled brush-hands engaged in House Painting are recruited from the failures of almost every other trade.

It is now possible to distinguish between the various classes into which semi-skilled labour can be divided. These are four in number. First there are the numerous specialized processes, which involve considerable skill within a very narrow range, and include certain branches of the Engineering and Electrical Trades, the factory industry of Boot-Making, Publishers' (Wholesale) Bookbinding, some of the processes of Leather Manufacture and the Machine-Rivetting of Tanks and Boilers. Such specialization is usually accompanied by the use of a great deal of machinery. Secondly, there are those occupations which may be called semi-skilled *par excellence*, in that they always have been so, and have not required the development of machinery or of specialization to make them so. They need no more than a moderate general level of manual skill and dexterity. With them may be grouped those workers who are semi-skilled because they have only learnt part of a trade. For some trades do not necessitate the thorough all round training of all their hands. The best workmen receive it, but others either can, or must, be content with a lower level and a knowledge of some parts only of the work. These, too, are usually the easiest ones. In

this class come carmen, navvies, warehousemen and cutters in the Printing Trades, and brush-hands in House and Coach Painting. Thirdly, there are jobs which may be placed in this grade on account of the responsibility and the often high degree of care and trustworthiness required of the workmen. Sometimes a certain amount of skill is also needed and sometimes it is not. Such jobs include those of crane drivers, scaffolders, stationary engine drivers and stokers, a good many labourers in chemical works and so on. Lastly, there are the men who are employed as mates or assistants to other workmen, as in some of the trades described in the last chapter.

The general method of learning is much the same in nearly all these occupations, though there are differences of detail. The most important of them is that in some cases a boy's job is distinctly preliminary to a man's, and in others there is little or no connection between them and they may not be in the same department or even in the same factory. Usually, however, there is some sort of connection, if only a slight one, and many firms make a point of recruiting their semi-skilled workers from boys previously employed in other parts of their business. In any case a start is made on a boy's job at the usual wage, which gradually increases till it reaches a maximum beyond which no rise will be given for that particular work; and many boys will have moved to other situations before this point is reached. Those who remain will then contrive to get themselves promoted to something better and gradually work their way up.

Usually at about the age of 18 there is a definite break. The boy's job has come to an end, the man's job has not yet begun. In the former the boy has attained both his maximum usefulness and his maximum wage and the work allows of no further advance. He has to leave it, therefore, and to find himself something more suited to his years. Such a break, indeed, usually distinguishes the semi-skilled<sup>1</sup> from the skilled worker; for in the life of the latter this

<sup>1</sup> An exception must be made in the case of those who are mates or assistants of mechanics.

break either comes much earlier or does not come at all. The former spends his time on boy labour till this fails him, and when it does, he contrives by good luck or good management to get into a job in the intermediate grade. In it he remains, and after this point progress is as described. The new process is learnt in a few months or a year at most, and then the learner still needs to increase his speed and to perfect the accuracy and economy of his working.

Such is the general method of "picking-up" semi-skilled work ; but differences in detail justify the separate description of individual trades. Semi-skilled occupations produced by specialization and the development of machine production fall into three classes—those in which there is a progression from an easier boy's job to a more difficult man's job, those in which boys employed about the factory are promoted to other work at a lower wage than is paid to a man, and thirdly those in which vacancies in the semi-skilled processes are filled by adult labourers. Examples may be found in the Boot, Bookbinding and Engineering Trades respectively, whilst the Leather Trades afford an instance of marked simplification, as well as specialization, in the processes.

In the Boot Trade the field is divided between the skilled artisan who requires a long period of training and the semi-skilled worker who does not. "Bespoke" work belongs mainly to the former, and in it "the craft"<sup>1</sup> usually has to make a boot throughout. Wholesale factory production, on the other hand, is subdivided among a number of semi-skilled jobs, and there are a good many homeworkers of this grade, who work by hand. A clear line, however, cannot always be drawn between hand and machine work, since one firm will put out processes which another keeps inside the factory. The extent of the subdivision also varies. Sometimes every little process has its separate worker, man, woman or boy ; but on the whole this is not carried so far in London as in some other centres. There, whilst methods differ, the normal factory demands not the

<sup>1</sup> The trade term to describe the skilled hand bootmaker.

most highly specialized worker, but a distinctly more capable hand who can carry out more than one job. The result is a body of workers who are essentially semi-skilled, and each of whom has to get to know a number of processes. Thus "training is hardly the right expression to apply, but rather experience. One man gets to know more sorts of work than another, often at much cost and trouble to himself, moving about from place to place in order to do this and starting afresh each time at low wages." A certain type of firm, indeed, attempts to keep each of its boys and men at a single thing in order to increase its hold over them; but more often a man is required to adapt himself to several.

Employment as a youth commonly precedes employment as a man. Sometimes a chap begins as a lad "about the factory," but usually he goes on sooner or later to some special boy's job. Where the Team System prevails, the work is divided up among a number of men and boys, and some of the latter fill vacancies among the former. In such cases, however, the proportion of lower grade workers is too great to enable all to rise in this way, but of the rest some no doubt secure other positions in the factory. Even where the Team is not found, moreover, there are often boys' jobs and men's jobs, with the chance of a rise from one to the other; and, speaking generally, the higher positions are filled largely by those who have started in the lower ones.

In this trade the simpler processes are carried out more frequently by older youths of sixteen and upwards than by younger boys. Such a late start, indeed, is a characteristic of much other semi-skilled work; and those employed in this way are young labourers who are paid as such and take their chance of getting better jobs afterwards. Frequently boys pure and simple are only employed in small numbers. "Men prefer," said one employer, "to take on a boy if they want one, show him what they want him to do, and let him go if he wishes to."

Similar, though not identical, conditions prevail in a great deal of bookbinding. The trade has three branches

—high-class binding, jobbing, and publishers' work. The first two are carried out by hand and require all-round workmen. Leather binding frequently need as full seven years' Apprenticeship, whilst jobbing necessitates a considerable, though shorter, period of learning, either by Service or Migration. In publishers' work, however, books are turned out by the thousand, and subdivision has been carried very far. Hence in a few months a youth can learn enough of a certain process to be put on piece-work, and after a further period of practice will be as fast as a man, and earn as good money.

This bears much resemblance to the conditions of the Boot Trade, and once again it is experience rather than training that is needed; but there does not appear to be the same gradation of boys' and men's jobs. Lads usually start "about the factory" and make themselves generally useful in one of the departments until they are promoted to some branch of the trade. Otherwise a youth will probably be got in from outside to fill a vacancy. Moreover the processes do not seem to be so minutely subdivided. Each one requires a moderate amount of skill, and so a boy who is put to one of them will probably stay at it. Here again there appears to be some deficiency of younger lads, though it is less marked than in the Boot Trade.

Heavy Engineering affords the best example of the third method where labourers are taken "off the floor" to operate machines and work their way up. A description of what is done in the North-East of England is worth quoting.

"In our trade, the semi-skilled man is the man who was on the floor, that is a shop labourer. If he is any good at all, he is taken to a small machine, say a drilling machine: then if he is any good at that, he goes to a planing machine and so on to a slotting machine and other things, but not to lathe work usually. Planing, drilling and slotting are usually worked by semi-skilled men who get higher and higher wages. . . . They get very good wages, not so good as the engineers, though better than the labourer gets."<sup>1</sup>

Such conditions cannot apply so frequently in London

<sup>1</sup> Poor Law Commission: Evidence of Sir Benjamin Browne, Question 86334. November 26, 1907.

because of the small size of many firms and the varied work of others. But in a few large ones which are engaged on new construction vacancies on some of the machines are filled from among the labourers. It is probable also that boys working the punch-presses, screw-cutting and other semi-automatic machines are sometimes promoted in this way, either directly or after a few years as shop labourers. Similarly, rivet-boys who fail to become rivetters are occasionally put to work as drillers. In the lighter electrical work, however, much of the machinery is operated by youths who gradually progress and either become fitters' or turners' improvers or get a semi-skilled man's job elsewhere.

All these processes show the same limitation in the scope of the work done by the individual man. At his particular job he is often very highly skilled indeed. Thus, Sir Benjamin Browne told the Poor Law Commission, "a number of them turn out beautiful work, although they have not the same range of power that the skilled man has. A semi-skilled man will work one machine as well as a skilled man will. When that is not wanted, the skilled man will go to another wholly different, but the semi-skilled man cannot do it nearly so easily."<sup>1</sup> His wages usually fall midway between those of the mechanic and the unskilled labourer, but in London, where specialization is often less marked, those of the higher grade of semi-skilled often approximate fairly closely to those of the artisan. In Engineering, for instance, the man who can operate both the planing and slotting machines may get nearly as much as the fitter or turner.

The less prominent, but probably more numerous, class from which skill of a moderate amount but of wider range is required, forms a permanent element in industrial life rather than a special product of modern conditions. It has grown with its growth rather than by the displacement of other grades. Indeed it is more likely to have been itself displaced in certain cases by the development of machine

<sup>1</sup> Question 86333.

production. Semi-skilled workers of this kind also fall into two classes. Of these the first consists of men whose business requires a fairly wide range of competence and who have to learn the whole of it. Such are carmen, navvies, street paviours, printers' warehousemen and cutters and so on. The second is found in trades such as House and Coach Painting where besides the skilled men there are others—usually the majority—who have only acquired a part of it.

The carman is an excellent example of the first class. Normally he is recruited from the vanguards, but not entirely, since soldiers who have learnt to drive sometimes take up his work. Boys usually "get on the vans" as soon as they leave school. Many of them only remain at it for a year or two, and few or none remain vanguards for more than four years.<sup>1</sup> During this time they will probably pick up a little bit of driving—moving the van, for instance, a few doors further down the street, backing it in and out of the yard and so on, and by the age of eighteen their wages will probably have risen to 10s. or 12s. a week.<sup>2</sup> The next stage is that of driving a light cart for a weekly wage of from 15s. to 20s. This lasts about three years, and by the recent agreement between the Master Carmen's Association and the National Transport Workers' Federation the matter has been put on the following definite basis:—  
"Cob and Pony Drivers, 12 cwt. vehicles, 15s., rising to 20s. No lads under seventeen to be employed."<sup>3</sup>

<sup>1</sup> "The average life of a van boy is four years." Spencer J. Gibb, *Problems of Boy Life*.

<sup>2</sup> Some large concerns, notably the Railway Companies, some big Stores and some firms of Carters and Carmen Contractors, try as far as possible to provide for their vanguards, and, where they have other departments into which they can be drafted, attain considerable success in this. Elsewhere a good many have to leave the job and find another occupation.

<sup>3</sup> *Labour Gazette*, August, 1911. The following were the rates of wages agreed upon for Carmen:—

|   |               |                                |
|---|---------------|--------------------------------|
| One Horse Drivers (25 cwt. Light Singles) | 22s. per week | } Overtime<br>6d. per<br>hour. |
| " " " (Heavy Singles)                     | 27s. "        |                                |
| Two Horse Drivers (50 cwt. Light Pairs)   | 28s. "        |                                |
| " " " (Heavy Pairs)                       | 31s. "        |                                |

If he has stayed in the business until he is eighteen or nineteen, the would-be carman probably remains permanently at it, since those who drop out usually do so earlier. He next procures a man's job, and his further progress depends partly on circumstances and largely upon his own abilities. His first rise will be to a light single van for which the minimum wage is now fixed at 22s. a week, and some will remain at this. Others will attain to better paid positions and even to that of a four-horse carman. The heavy brewers' drays require the greatest skill, but their draymen appear to be a class apart, and to come chiefly from outside London.

Other occupations of this kind are recruited in a similar way from boys and youths, or sometimes from adult unskilled labourers. The navvies require some skill and a good physique, and piece-workers among them make high earnings. "Take the navvy," Sir Benjamin Browne told the Poor Law Commission, "you want to dig a hole somewhere; if you get a navvy and pay 4s. 6d. a day he will dig the hole for half the price a labourer would do it for at 3s. a day, because he knows exactly how to dig a hole and use his spade and shovel."<sup>1</sup> In this job the strength needed prevents a boy doing the actual work, but on any big contract various young labourers are employed, and these in time get hold of a spade and so gradually learn.

The paviour is made in much the same way, as the following statement by the Engineer to a London Borough Council shows. "Young fellows start as labourers at 6½d. per hour, and if they are smart they will be given a little work to do if there is a pressure of work and will be promoted in time to the class we call improvers with an immediate rise of wages of ½d. per hour, and after this rise gradually to the full rate." The comparatively high wages that are paid

|                     |               |                      |            |
|---------------------|---------------|----------------------|------------|
| Three Horse Drivers | . . . . .     | 34s. per week        | } Overtime |
| Four Horse Drivers  | . . . . .     | 38s.     ,,          |            |
| Vanguards           | { first year  | . . . . . 7s.     ,, | } Overtime |
|                     | { second year | . . . . . 8s.     ,, |            |
|                     | { thereafter  | . . . . . 10s.    ,, |            |

1s. per hr.  
3d. per hr.  
4d.     ,,  
4d.     ,,

<sup>1</sup> Question 86298.

in it appear at first sight to prevent the classing of this employment as semi-skilled ; but against them must be set its seasonal character and the exposure to the weather that is involved.

Mention may also be made of printers' warehousemen and cutters. Their work has two branches which are often performed by the same person. One consists of general warehouse work, and the other of folding and cutting paper, and, where magazines are being bound, operating the wiring machine. A few firms adopt regular methods of teaching, and there are occasional Apprenticeships for short periods and at a comparatively high rate of pay. Otherwise the whole thing is quite haphazard. Numerous messengers are employed by large printing offices, and the smarter of these are put to help the men and in time get on to the bench and do a little cutting and so eventually pick up the job. One firm stated, however, that it had adopted a form of Apprenticeship owing to the bad effect that the more casual kind of employment had upon the boys. Warehousemen earn up to 32s. a week and cutters in the best firms as much as 36s.

The conditions prevailing in trades where a portion only of the workers acquire the whole business, are somewhat different and deserve detailed treatment. Sometimes there is only a limited demand for the higher grades of labour and a far bigger one for the lower, and at others this result is caused or accentuated by defective methods of teaching and recruiting. Cart and Van Painting provides an instance of the former, and House Painting of the latter, each of them being in itself a skilled trade, but either requiring, or finding room for, a considerable amount of semi-skilled labour.

In the former the painters proper are assisted by a much larger number of brush hands.<sup>1</sup> The latter paint the bottom of the vehicle throughout and the body except for the final coat or, in the technical phrase, "finishing," which

<sup>1</sup> A special class of heraldic decorators is engaged upon such things as armorial bearings.

is put on by the painter. He also does the more elaborate processes such as toning, glazing and so on. The painter gets from 8½d. to 9d. per hour and the brush hands from 6d. to 7d., the work as a whole being far more regular than that of the house painters in the Building Trades. There is, moreover, a very definite division between the two grades. Several brush hands are required to keep one painter busy and only a few of those who enter the trade can hope to reach his position.

The painters, however, are recruited mainly from the brush hands. Apprenticeship is unusual. The boy enters as an errand boy and his promotion depends upon his own capacity and to some extent upon the size of the shop. "One of the two boys in my employ at painting," said one employer, "started like the others as an errand boy and gradually got to do the cleaning up of the vans ready for the painter, and then got hold of a brush and made himself into a very good little brush-hand as he is now." The majority of the men do not go further, but remain semi-skilled workers. So far, therefore, this method is simply that of teaching the easier half of a skilled trade, but from this point those who are to reach the higher grade can gradually work their way up.<sup>1</sup>

There is no such necessary distinction between different branches of House Painting, and in it, therefore, it is mainly lack of training that keeps certain persons to the less skilled portions of the work. In practice house painters fall roughly into three grades—the highly skilled interior decorators, mostly of the West End Furnishing Houses, the ordinary house painters employed by the larger Builders and Contractors and by smaller firms of a good class, and

<sup>1</sup> The boy in question was expected by his employer to go further. "If he chooses," the latter added, "to practise with his pencil in his spare time, at home, in the dinner hour and so on, and he shows he is up to the work, I will give him a chance at lining and make him into a painter. But he must show he can use the pencil first or the risk will be too great. He will, however, have to go elsewhere as an improver to finish, owing to the small size of my shop."

the casual brush hands engaged upon the rougher work.

Members of the first class are recruited little if at all from among the ordinary house painters. They come mainly from the provinces. Such of them as are Londoners are trained with very considerable care. Either there is a Bound Apprenticeship or they are taken on under their fathers. Their rate of pay varies from 9d. per hour upwards and some earn considerably more. In many ways, indeed, they resemble a separate trade more nearly than a higher grade of labour within a trade, and their numbers are a small proportion of the London painters.

The bulk of these belong to the other two classes. The ordinary House Painters reach a fair level of skill and earn 8½d. or 9d. per hour, but are frequently out of work for a long time during the winter. Such of them as acquire their business in London have usually started as boys to assist the painters and make themselves useful, being sometimes taken on with their fathers. The learner, therefore, is really a young painter's labourer and in time is put to clean the walls in preparation for the painting, and after this gives the first coat of paint or paints parts of the house where appearances do not matter much. Thus in time he becomes a painter. The abler of these men ought perhaps to rank as skilled workmen, though their wages are lower than those of other artisans in the Building Trades and their employment less regular, but the less capable must be regarded as semi-skilled.

Below them come a very large number of casual and often low-skilled brush hands, who have picked up their business anyhow. They can often do little more than the roughest and easiest parts of it which are very quickly learnt. As a result the trade has become the refuge for the failures of nearly every other. Ex-sailors are most frequently found in it and often work successfully at it, but almost every trade and even unskilled labour contribute recruits to it at one time or another. The Distress Committees, for instance, find it to be quite a common thing for labourers to say that they either could do or had done painting.

Its seasonal character intensifies the difficulty. There is a severe winter slackness and even in bad years two periods of very heavy pressure from mid-March to May and in August and September. Each lasts about six or eight weeks. In London the latter is the busiest of all, and so great is the pressure that foremen are often compelled to put on any labour they can get, and to keep on any man who has the least idea of handling a brush. Thus it is not difficult to pick up a slight knowledge of the rougher work; and sufficient to provide a more or less precarious living is easily acquired. But the men who do this become at best semi-skilled and are often hardly that. Many of them do not earn more than from  $6\frac{1}{2}d.$  to  $7\frac{1}{2}d.$  per hour and some of them do not get more than a few days' work in the week or a few months in the year.

The third of the four chief branches of semi-skilled labour is made up of those who rank as such less in virtue of manual skill, than of the responsibility placed upon them and of the honesty and trustworthiness required of them. They have to exhibit, therefore, care and steadiness above the average, either in addition to, or in place of, such skill as they may or may not possess. Hence such employments are recruited almost entirely from grown men. The scaffolder, for instance, not only requires considerable dexterity in tying ropes and making knots, but since the safety of a number of other men depends upon it, his work has to be done with very special care. It is largely in the hands of ex-sailors whose experience on ship board peculiarly fits them for it.

Another such employment is that of the drivers and stokers of stationary engines in factories. When a vacancy occurs, an intelligent labourer is selected to fill the position of stoker with a rather higher wage than before. If the engine-driver's post falls vacant, the stoker will be promoted to fill it. Again the crane-driver who has displaced the hodman on large buildings has a very responsible post when dealing with the large Scotch derricks. Two men and a boy are usually in charge, and the chief man's place would

be filled by the second hand and sometimes the latter's by a boy. The practice appears to vary between taking a man from outside and promoting a lad. The bigger cranes require two or more persons to operate them, and so a novice can be started in a less responsible position. All these occupations require further of those who follow them a certain amount of manual skill.

Typical, perhaps, of the men who, with little or none of this, yet need to possess certain qualities which raise them above the level of the ordinary unskilled labourer, are the bulk of workers employed inside the chemical factories. Their position was admirably described by Mr. Esmé Howard in *Life and Labour of the People*. Usually the staff of a factory consists of foremen, chemical labourers, employed in various parts of the manufacture, and presided over by an intermediate grade of leading hands, and yard labourers. The chemical labourers form the most important section and are recruited from the best of the yard labourers and in their turn recruit the leading hands. Care, intelligence and good behaviour are what are required of them, and this is even more true of manufacturing druggists where the effects of a mistake would be much worse.

"The ordinary chemical labourer," wrote Mr. Howard, "is rather to be called disciplined than skilled. . . . When a new process is to be tried, the trained chemists superintend its course until the foreman or leading hand in charge has become thoroughly acquainted with it, and then these men. . . . become responsible so long as the process is continued. . . . But the great body of labourers need little skill and acquire no special knowledge; they have only to carry out exactly the orders given. The qualities necessary for a good chemical labourer are, as for a soldier, attention and obedience, and the closeness of the parallel is curiously shown by the preference given in some factories to men who have been in the army."<sup>1</sup>

In short, as Mr. Howard pointed out, they are trained if not skilled. The returns given in *Life and Labour of the People* show their wages for a full week to have been from 24s. to 26s. in 1892, and their total earnings one week

<sup>1</sup> *Life and Labour of the People*, vol. vi. p. 100.

with another as much as 30s. owing to the amount of overtime that is frequently worked.

Finally, there are those who have definite positions as the assistants of an artisan, such as plumbers' mates, hammermen and railway stokers. Detailed description of them is not required, since the method by which a youth becomes a good mate or hammerman was fully dealt with in the last Chapter—the help of a relative or friend, the years of light work in a small shop, and then, with growing strength, the job in a big one at a lower rate till he becomes a qualified assistant at the full standard wage. On the Railways this progression may be even more regular. A youth starts first as an engine-cleaner at 14s. a week and at eighteen or later is promoted to be a third or fourth class stoker getting 18s. a week and rising to 21s., and from this gradually reaches a better position, the maximum wage of a fireman being on most railways 27s. a week.

Semi-skilled labour thus falls into four classes, viz., specialized labour with a high level of skill within a very narrow range, unspecialized labour, with perhaps nearly as wide a range as the mechanic but with a far lower level, the men whose work requires great care, attention and steadiness with or without a modicum of manual dexterity, and the trained assistants of the artisans. Semi-skilled labour is on the whole on the increase and is tending, particularly in the case of the specialized processes and of a few others such as cranemen, to displace men either from the higher or lower grades. The first of the four classes is attracting the most attention both in this and in other respects. Its growth has certainly been rapid and it is worth considering how far its increase or that of semi-skilled workmen of other kinds has reduced the demand for the artisan.

The common assumption that there has been an absolute displacement of the latter and a net loss of skill among the manual workers as a whole, cannot be accepted without large reservations. In some cases there has been an actual improvement in skill where the unskilled labourer and not

the mechanic has been replaced, as the hodman has been by the crane-driver. In the Engineering Trades, too, the specialization upon particular machines appears to be producing a similar effect. Sir Benjamin Browne, for instance, has expressed the opinion that in it there is getting less and less room for the absolutely unskilled labourer, "for we specialize more every day."<sup>1</sup> The subdivision of skilled work, therefore, is to a great extent balanced by this taking over by semi-skilled machine-minders of much of the heaviest and least skilled drudgery.

Secondly, most of the reduction in the demand for skilled labour is a relative rather than an absolute one. In amount it has as a rule not decreased but increased, whilst the semi-skilled workers have multiplied more rapidly. In other words the one has expanded at a normal, and the other at an abnormal rate. This may not be true of the Boot Trade, where there appears to have been a direct substitution of the lower for the higher grade, nor of certain branches of leather manufacture in which some of the processes have been much simplified. But in Engineering, specialization and expansion have normally gone hand in hand. The big, prosperous and growing concerns are adopting the former, and largely increasing their demand for artisans at the same time. Indeed, it is stated on good authority that much of the increase in this industry would not have been possible without the cheapening that has been brought about by these changes.

Thirdly, no allowance is made for the general rise in the level both of skill and wages that can be seen among all classes of workpeople. Thus, once more to quote Sir Benjamin Browne, "the semi-skilled workman of to-day is in many cases as good as the skilled was a quarter of a century ago":<sup>2</sup> and again, in reference to the whole body of workpeople, "you will find the wages are getting higher and higher and the hours shorter and shorter, and they are turning out a better class of work."<sup>3</sup> Thus a redistribution

<sup>1</sup> Poor Law Commission Evidence. Question 86305.

<sup>2</sup> *Ibid.* Question 86333.

<sup>3</sup> *Ibid.* Question 86336.

between different grades may go hand in hand with an improvement in the standard of capacity which each of them possesses.

Finally a reduction in manual dexterity need not mean a loss of general ability but merely a change in its character. A decrease in this respect may be balanced by an increase in mental powers—in intelligence, in alertness, in adaptability. This subject, however, will be discussed more fully later ; but enough has been said to cast doubts upon any hasty generalization as to a decline in the skill of the manual working classes.

Semi-skilled employments exert an important influence upon the problem of boy labour. Like the skilled trades, they require special treatment adapted to their particular needs. Whilst, however, separate measures and a separate organization are necessary for each of these two grades, yet it is essential that they should be co-ordinated. Semi-skilled work, moreover, does something to provide an escape from one of the great difficulties of our time, that of Blind Alley employment ; and in the relations in which it stands to the juvenile worker will be found one of the clues to the solution of the problem.

First, there is the fact that the age of entry into it is usually later than either into a skilled trade or into boy labouring. Some of its branches, therefore, are recruited from among adult labourers, and in most others employment upon the actual process does not begin till after seventeen. Frequently it happens that a lad first spends some years as an errand or factory boy, or, as in the Boot Trade, at some easy boy's work. But those processes which give a permanent occupation are normally recruited from youths of seventeen or eighteen, who in other words are thus wanted in these trades just at the age when ordinary boys' jobs are beginning to fail them.

Secondly, semi-skilled work is both permanent and easy to acquire. It lasts a man for life, provided he has no higher ambitions, and in most cases it is not hard to learn. Needing only a moderate level of skill, which can be obtained

in a short time, it is not beset by the same difficulties and dangers as a skilled trade. In the latter, just as far more is obtained by success, so is the risk of failure the greater. Hence a youth of seventeen or eighteen who is not yet provided for can be placed with comparative readiness in semi-skilled labour, which does provide a definite livelihood for those who follow it, even if this is only on the basis of a moderate standard of living.

The semi-skilled employments, therefore, since in most cases they do not begin till a later age, and are able to give a permanent occupation when they do, are well fitted to act as the antidote to the Blind Alley. At seventeen or eighteen a break comes in the life of many boys. Boy labour ends, men's labour has not yet been secured ; and the change of job has to be made. At present, however, too many Blind Alleys are not connected, as they might be, with situations in semi-skilled processes that are waiting to be filled ; and the problem is to link up the one with the other, and to make the passage between them easy and not, as it is now, difficult and likely to be missed.

Much semi-skilled work, therefore, is well fitted to achieve this purpose. In some cases where the boys' jobs and the semi-skilled jobs are in the same factory, this is sometimes done now if only in a rough and ready way, and it is capable of considerable extension. Thus boys working semi-automatic machines could often be promoted to better paid jobs, were it not that their failure to stick to their work frequently prevents this. Such dovetailing, however, can perhaps be best illustrated by a description of a large leather factory in which efforts are already directed to the promotion of its boys as they grow up. As a result the firm is almost self-sufficing, and its vacancies are nearly all filled from within it.

It is engaged in manufacturing light leather out of sheep's and goats' pelts or what is known in the trade as "split leather," leather which is used for hat bands, pocket books, photo frames and so on. When first brought into the factory the pelts go to the lime pits in which they are left to soak,

usually for about three weeks. The work is let out to "gangs" consisting of a head man or "lime jobber" and labourers; and to fill vacancies among the former, a suitable man is promoted from another department. The labourers start at about twenty years of age, and are gradually initiated into the work. The pelts are then taken to the "fleshers" by whom the flesh still adhering to the inner hide is removed with a sharp two-handled knife. This is a skilled job and boys are apprenticed for three years to the Fleshers' Union and put under the charge of a workman as its representative.<sup>1</sup> The splitting or separating of the inner from the outer pelt, follows.<sup>2</sup> It is done on machines, each worked by a man and a youth. In this firm the men are recruited from their helpers, of whom, however, there is of necessity a considerable surplus.

The pureman next treats the skins with bark or other substances preliminary to the actual tanning. Here, as in lime-jobbing, the work is done by a headman and labourers. The two head tanners are the only skilled men in the Tanning Department, and are assisted by numerous men and boys, the latter doing such preliminary jobs as cleaning the pelts and the former carrying out the main processes under the direction of the tanners. These labourers are mostly unskilled and are recruited from the boys. Intelligent men are raised from other departments to fill vacancies among both the head puremen and the head tanners. Dyeing too is more or less unskilled and is mostly done by lads, a few of whom are promoted to be strikers-out.

The leather, coming wet from the dyers, is apt to shrink and needs to be smoothed and levelled out to its full length. So the wet hides are laid upon a table and forced out again to their full size, and thus the moisture is gradually got out of them. This is a semi-skilled process, performed by men, and is known in the trade as striking-out. The leather, being still damp and apt to crumple, is next strained by being tacked on to boards. Care has now to

<sup>1</sup> As described in Ch. IV. *Supra*.

<sup>2</sup> As described in Ch. VI. *Supra*.

be taken to stretch it to its full dimensions. Otherwise speed in working is the prime necessity. When a vacancy occurs, a boy or youth is put to it and soon works as quickly as the men.

Last comes the finishing, by which the glaze or varnish or, in some cases, a grain is given to the leather. For most of this work machinery is used : but the final grain is put on by hand. Hand finishing requires considerable skill, and machine finishing is a good semi-skilled job ; but to each of them learners are carefully brought up. They are usually selected from the firm's errand boys, the brighter ones going to the hand process. The others are put at the back of a machine and gradually work their way round to the front.

Methods of production vary so much in this trade that no one firm can be regarded as typical of all, but this combination of a number of branches, involving different levels of skill, is common in the leather factories. Thus in the firm just considered we get skilled work directly recruited by boys engaged to learn it, processes employing a surplus of boys, among which are both Partial and Total Blind Alleys, and processes that require few of them and are capable of absorbing some from the other departments. These latter include employments of the intermediate grade, like Machine Finishing and Striking-out, and unskilled ones, such as those of the labourers in Tanning, Straining and Lime-Jobbing. Lastly, there are a few higher positions, to which the more intelligent men can hope to attain.

A surplus of boys in some departments, therefore, can be provided for in others, as to a great extent they are already, and the better firms at least make a special effort to bring this about. Thus many of those who come in as lads can work their way up to some sort of a permanency. The firm in question stated that "we find room for a good portion of our boys ; but a part of them are so rough that we cannot do anything with them, and they won't ever be more than unskilled labourers and do not want to be." The trade contains a sufficient variety of employments to

offset at least partially the Blind Alley character of some of them ; and undoubtedly more could be done in this way, especially if employers could be provided with more suitable labour. Moreover even where the whole process is not carried through in one factory, the necessary arrangements to transfer boys from one firm to another should not be very difficult, whilst there is the further possibility that the boy labour of one trade could be dovetailed on to the semi-skilled adult labour of another.

It is in these directions, therefore, that semi-skilled work is to a great extent the antidote to Blind Alley jobs, since it often provides means of employment just about the time when a large number of youths are seeking for it. But it has its own special dangers. One phase of the Problem of Boy Labour consists in failure to provide permanent employment, and to this every grade is liable, and the semi-skilled one not the least. For it may lead to frequent failures to acquire an occupation. Many semi-skilled jobs are quickly and some of them quite easily learnt ; and so special arrangements for teaching them are seldom made or needed. They are, therefore, as easy to leave as they are to enter, and many boys and youths throw them up on the slightest pretext and go elsewhere, so that, when they come to manhood, they have failed to attain capacity to do any definite thing. Even in the skilled trades this is common enough, but in them there are some checks upon it. The difficulties of learning may dishearten a boy at first, but they at least do something, both then and later, to keep him to his work, and agreements and understandings also assist thereto. In semi-skilled work the latter hardly exist, and the ease with which it can be picked up makes a boy think that fresh work is always to be found. So he becomes careless, tries many things, settles at no one of them and thus learns nothing properly. Often he learns nothing at all.

The second danger is that these processes will absorb boys who are capable of something better, as has already been described in the case of plumbers' mates and assistants ; and when a boy of ability enters one of them and stays

there all his life the result is a double economic loss. He himself has to be content with a lower standard of skill and livelihood than his capacities warrant, and the community loses by the waste of his powers on lower-grade work. At present there is little to prevent this result and many causes to produce it.

To sum up, therefore, semi-skilled labour has undoubtedly the special advantages that its actual processes generally require a deficiency of young boys and that it provides a definite occupation for life. Thus it could be made to act as an antidote to the Blind Alley. It has also its special dangers. The ease with which it can be learnt has caused the teaching of it to be left to look after itself, and so learners are far more likely than in the skilled trades to run wild and learn nothing. Secondly, there is the danger that those who are capable of better things will enter and remain in a semi-skilled job.

Organization is required, therefore, both to utilize its merits and to avoid its dangers, and it is in connexion with the provision of this that skilled and semi-skilled employments come into their closest relationship. Their problems differ, but an organization is needed which shall embrace both. In each case the right boy has to be put into the right job, and prevented from going to an unsuitable one; and those who are most capable of skilled work should, so far as possible, have the preference for it. Those below this level, or those for whom the skilled trades cannot find room, are marked out to be distributed among the semi-skilled jobs, according to their capacity and inclination. For besides the wider distinction between the different grades, there are narrower gradations of skill within them. Finally, industry requires, and is likely to continue to require in the future, much unskilled labour, and this should be set aside for boys and men whose capacity, relatively at least, is no more than equal to it.

The boy, therefore, has to be fitted to the job, and though this end can only be gradually achieved, a start has already been made. Thanks to the Labour Ex-

changes and other agencies, more are being put into suitable positions than before, and still more and more will be in the future as their organization is perfected. The further this work is carried the easier will it be to extend it. But this is not all. For it is necessary that those who go to semi-skilled and unskilled labour no less than the skilled artisan shall be made each in his own position into good workmen—steady, disciplined, and intelligent. Not only must a boy be put to a job, but he must be kept at it and prevented throwing up one after another at his own sweet will. That is to say, we have to organize boy labour, first by putting boys in their right positions and then by enabling and, if necessary, compelling them to make the best of themselves in them. To do this is one great problem of semi-skilled labour, as it is of other grades; and arising out of it is that of using these jobs to their fullest extent to meet and remove, as they can do, the dangers of Blind-Alley employment.

## CHAPTER VIII.

### VALUE OF DIFFERENT METHODS.

Methods Actually in Existence—Reasons for Subdivision of them that is adopted—Difficulty of Estimating Numbers who learn under Service or Migration—Numbers in Following-Up, and the Semi-Skilled Trades—Relative Position of Service and Migration—Chapter mainly concerned with them—Need for separate consideration of Formal and Informal Service—Learnerships—Necessary Qualities of a good system of teaching—Regularity: Variety—The Indenture—Its Advantages—Bad Results of its Absence—Objections to it in certain trades—Causes of Difficulty—Discontented Apprentices—Informal Service and the Right of Dismissal or of Leaving—Modicum of teaching essential as a result—Its Elasticity—Support for both Methods—To be successful Formal Apprenticeship should be general—Trouble caused by difficulty of breaking Indenture—Means, and Existing Instances, of facilitating this—Fourth Parties to Indentures: Skilled Employment Associations, Juvenile Advisory Committees—Abandonment of the Premium—Causes of this—Survival for Special Reasons—Attitude towards Apprenticeship when it is Universal or General; the Printing Trades—Where it is not; the Building Trades—Its value in setting up a Standard of Teaching.

Migration compared with service of any kind—Its Variety and Lack of Regularity—Its Merits—Higher Earnings Afforded—Value to poor but able boys—Its Necessity—Its Disadvantages—Throws too much responsibility upon the boy—Irregular employment in trades where it is common—In itself makes changes of job inevitable—Boy left without control, when it is most needed—Teaching as a rule less good than under Service—Control though non-existent is even more necessary—Organization required—Summary of Methods—Tendency of "mixture of methods" to make it difficult to get the best out of any of them—Need and means of reorganizing them.

The Other Methods—Following-Up—Its Peculiarities and Dangers—Picking-Up—Features of training for Semi-Skilled Work.

The Four Methods require to be organized in co-operation as well as individually.

BEFORE considering the value of the various existing methods of acquiring a trade, it will be well to recapitulate briefly what they are. Four main divisions may be distinguished, namely, Regular Service, Migration and Following-up, in the case of Skilled Work, and the Picking-up of Semi-skilled Trades. These may again be subdivided as follows :—

*A. Regular Service.*

Formal 1. Bound Apprenticeship.

Informal 2. Definite Verbal Agreement.

„ 3. Employment during Good Behaviour.

„ 4. Working and Learning.

*B. Migration.*

1. Generally or Largely Adopted in a Trade.

2. The Result of Misconduct by the Employer or the Boy.

3. Chance openings taken advantage of.

Between these two methods lies a new one that is growing in importance :—*Short Service followed by Migration*, where a boy serves for a few years and comes out of his time a good improver.

*C. Following-up.*

1. Where a Mate assisting a Single Mechanic acquires a trade.

2. Where boys working in a squad rise to fill men's jobs.

*D. Picking-up of Semi-skilled Trades.*

1. Trades where a high level of narrowly specialized skill is required.

2. Trades requiring only a moderate level of skill, but of a wider range.

3. Trades in which special care and responsibility are needed.

4. Semi-skilled Assistants of Mechanics.

Thus, in each case a different method of subdivision has to be adopted. With Regular Service it is based upon

the difference in the various kinds of agreement or contract under which a boy works, and with Migration upon the reasons which induce him to learn in this way, whilst with Following-up it depends upon whether he works with one man or several, and with semi-skilled trades upon the kind of skill or service that is required of him.

Secondly, with Service and Migration, one sometimes predominates markedly whilst the other is only occasionally found. Among compositors and stereotypers, Formal Apprenticeship is almost universal; and among wood-working machinists and French polishers there is not very much Regular Service. Often again, one method may be the normal rule, whilst the other has a smaller but still definite place. Thus Service is usual, but not unchallenged in Mechanical Engineering and Silversmithing, and so perhaps, if only the wholesale trade of East London is considered, is Migration in Cabinet-Making. Thirdly, the two may be more evenly divided, as in Joinery, and perhaps in the making of leather goods. On the other hand, the third and fourth methods are usually confined to definite trades or branches of trades, and in them cover the whole ground.

The extent to which these different methods prevail varies so enormously from trade to trade, and is so largely a matter of guess work, that any attempt to estimate the numbers who depend for their training upon them would be practically valueless in the case of Service and Migration, but a rough calculation can be made of the workmen affected by the other two. Thus, in Greater London, the total number including assistants engaged in the chief trades that adopt Following-up was in 1911 just over 44,000 and in the Rest of England and Wales about 233,000, to which workers in Bakeries, 19,014 and 59,716 respectively, ought perhaps to be added, since in London at any rate a modified form of it is found in them. Boys rise to be Third Hands, and the latter to be Second Hands and from them the First Hands are recruited. Semi-skilled employments, again, including assistants in Following-up totalled about 330,000 men and boys in Greater London. In all these figures, how-

ever, an allowance must be made for the employers and foremen who were included in the trades concerned, as they have not been separately estimated in the Census.<sup>1</sup>

The total number of men and boys engaged in skilled work in London<sup>2</sup> in 1911 has been put at about 482,000, of whom Following-up, including Bakery workers, appears to account for about 32,000, leaving some 450,000 in trades acquired by Service and Migration. Whilst, however, no useful estimate can be obtained of how this number is divided between them, some general deductions can safely be drawn. Formal Apprenticeship plays but a small part outside the Printing Trades, but the majority of the workers, and probably a fairly substantial majority, appears to learn under some form of Regular Service. It claims the allegiance of some very important industries and of a good many smaller ones. Its predominance is specially marked in the Printing and Engineering Trades, and somewhat less so in the Art Metal and Instrument group. Moreover, even when it is most common, Migration never possesses so clear a supremacy as Service often has. In the three groups just mentioned, for instance, it is only in a few branches, notably Silversmithing and the making of Electrical Machinery, that Migration plays at all an important part. Again, where, as in Bookbinding, the bulk of the workers are semi-skilled, Regular Service, sometimes in one of its more rigid forms, is usual among the minority of skilled men.

Migration, on the other hand, owes its strong position less to marked predominance in a few, than to its presence as an important competing method in a large number of, industries. It is most prominent in Woodworking and Building and in the making of electrical goods, electrical machinery and leather goods: but it is doubtful if it is clearly predominant over Service except in a few branches such as French Polishing, House Painting and, perhaps, Machine Woodwork. It should be remembered, however,

<sup>1</sup> See Chap. I.

<sup>2</sup> The figures given for London refer, unless otherwise stated, to Greater London.

that the comparison is with all forms of Regular Service. If it were with Apprenticeship alone, the result would probably be very different.

The present Chapter will attempt to estimate the value of all the different methods of acquiring a trade, but will deal mainly with Service and Migration. Following-up and the modes of teaching in the semi-skilled industries have already been considered, and though each has some peculiarities, what is said of the first two methods largely applies to them. A boy who is "following-up" his trade, for instance, may have to migrate from firm to firm during the process, and will be liable therefore to the dangers of Migration, which will be increased, on the one hand, where the process is a partial Blind Alley, and decreased, on the other, when he starts with continuous regular work for some years in a single firm and in a trade that absorbs most of its boys.

So far Regular Service and Migration has each been considered as a single group of methods, the presence or absence of continuous employment having been regarded as of sufficient importance to outweigh other differences. It is now necessary to subdivide the former into its various branches, each with merits and deficiencies of its own. Indeed, the less formal methods may almost be said to stand midway between Indentured Apprenticeship and Migration, and at their best combine many of the advantages of both of them. If, therefore, a general term is required to cover all forms of this informal service the need is perhaps best satisfied by the word *Learnership*.

Many boys are now being definitely engaged as learners for a period of years, but without any formal agreement, and many employers, owing to the trouble which indentures involve, are refusing to bind those whom they teach, and prefer conditions which reserve to them the right of dismissal.<sup>1</sup> In the displacement of Formal Apprenticeship, therefore, *Learnerships* are playing at least as pro-

<sup>1</sup> The Assistant Manager of a London Exchange said, "Employers won't have the system of bound Apprentices. What you do find now are learnerships."

minent a part as is the increase of Migration. Under the term, moreover, must be included not merely the definite verbal agreement, but employment "during good behaviour." Probably also the fourth form, "working and learning," can be so described where a firm takes boys in this way with the deliberate intention of allowing them to learn a trade. Where, however, there is no such intention, and boys here and there just happen to learn, the name is scarcely appropriate. Perhaps, therefore, unless otherwise stated, Learnership is best confined to the second and third forms of service. It seems likely, indeed, that if an ideal method of training is found, it will consist either of a carefully regulated system of Learnerships or in Short Service, whether formal or informal, to be followed by Migration.

Among the qualities necessary to a good system of teaching, two which possess fundamental importance are those of "Regularity" and "Variety." In the earliest years of his working life it is essential that a boy should work under fixed and definite conditions. He requires continuity of employment and of teaching and the chance to progress steadily, together with systematic care and supervision. These qualities may be summed up in the term Regularity, and whilst mere employment in a single firm does not guarantee them, it is usually a necessary preliminary to obtaining them. So far then as they are concerned, conditions under Regular Service are generally favourable. But a boy also needs to master different methods of working and the different kinds and qualities of work, and so the experience necessary to him is often wider than a single shop is capable of giving. This is the quality of Variety, in which the advantage often rests with the Method of Migration. A certain number of firms satisfy both requirements, but many more cannot, and therefore the choice of the best method depends largely upon individual circumstances. Indeed, it is in provision to meet problems such as these that our present industrial organization is most defective.

The comparative merits of Apprenticeship and Learnership must first be considered, and with this question is bound up that of the Indenture and Premium. On a superficial view the advantages of the former are obvious, since, where its conditions are properly observed, it does put the teaching and the control of the boy upon the most regular basis, and ensures the best possible care and attention. Above all, it emphasises the relations of employer and apprentice as those of teacher and learner. At its best, therefore, Apprenticeship does make for that insistence on the essential importance of teaching, which was the finest feature of the Elizabethan system. Really to make the best of it, however, it should be applied, as it very seldom is, uniformly throughout a trade; but even where it is not, it does sometimes put some check both on the boy and the employer. In too many such cases, however, it fails to do so.

Informal Service, however, must be judged by its successes and failures taken together, and on the whole the proportion of the latter is likely to be smaller under Apprenticeship. Where there is no formal tie, a boy is more likely to leave to get higher wages or to be dismissed for slack trade or other reasons. Moreover he often thinks he is earning more than he is paid for certain work, making no allowance for the expense and trouble of teaching him, and either obtains a rise from his employer or moves to another firm in order to do so. But if he is always to secure his full immediate value in this way, his master can less well afford to teach him better work and he gets less chance to improve. In fact, in many cases the employer will have so to regulate his work as to secure a full return from it week by week, and cannot, as under Apprenticeship, afford an immediate loss for the sake of a higher future gain. For, if after being taught part of a trade, the boy is going to be attracted elsewhere by better money, the employer must act accordingly and keep him at the work which he can do well. It is only fair to add that in many trades most of these tacit agreements are fairly carried out on both sides.

A boy does not leave a decent master nor a master dismiss a satisfactory boy ; but there are a good many instances to the contrary.

Moreover, under these conditions both employer and learner are far more apt to regard his employment as that of a labourer rather than a learner, and for these reasons the displacement of Apprenticeship is lamented, and its restoration suggested, in the Art Metal and Instrument Trades. Further, all boys do not start with a preference for employments giving the highest wages, but many on the contrary are determined to learn at all costs.<sup>1</sup> Under the informal system, however, the habit of looking first to what can be earned is apt to grow up gradually, and having caused a lad to move once or twice, it finally leads him to do so for any or every reason and at length almost without reason.

Such are the respects in which Apprenticeship possesses the greatest advantage ; but there is much to be said for the less formal Service, and it obtains considerable support. Many firms in the Building and Engineering Trades are refusing to bind boys and are substituting employment " during good behaviour " or an informal agreement. " The boys get taught," said one of the latter, " in exactly the same way as an apprentice would be, but we will not bind ourselves to teach him." The chief objection to Apprenticeship springs from the attitude and behaviour of the boys themselves. Being bound for from five to seven years, as the case may be, so that they cannot be got rid of, they presume upon this, feeling that their position is secure and that they have plenty of time before them. Some, as a result, are openly lazy or unruly ; more simply take things easily, and do not bother themselves, and thus only realize their position as the end of their time approaches. This source of trouble is quite common, and many of those concerned declare that " apprentices are more trouble than they are worth," and that in their last year or two,

<sup>1</sup> Sometimes they and their parents will even accept unnecessarily low wages in return for an offer to teach a trade

when they should be compensating their employers for the loss hitherto involved in teaching them, they are barely earning their wages.

The difficulty is mainly caused by the fact that the ordinary form of Indenture does not permit the dismissal of an apprentice except at considerable inconvenience, and after the trouble of taking him to the County Court. In the old days, before the right of an employer to thrash an unruly one had lapsed, it was different ; but now without the power of dismissal there is no easy means of controlling him. On the other hand, a lad may be tied for years to a master who is failing to teach him, and where the use of Apprenticeship is spasmodic, it assists unscrupulous firms to exploit their boys.

Again, where alternative methods of learning are available, the apprentice may see that others who are learning his trade, perhaps even in the same firm, are being paid more than he is. As a result he becomes discontented and lazy, and only does an amount of work which he considers to correspond to the wages he is receiving. Hence he comes out of his time less efficient than he might have been, and ought to be, and suffers accordingly. One foreman, a very successful teacher, told me that he used to say to his boys : " Never mind if you are earning for your employer more than he pays you. You have to look to the years in the future and learn all you can about your trade. So the more you earn for your employer now the more you will earn for yourself when you are a man." But many boys do not see this, to their own and others' loss. To this, too, must be added, so far as the employers are concerned, the cost of bench room, of spoilt material and of loss of time and temper by foremen and men, this last by no means a small item, and there is little cause for wonder if they prefer to teach their boys under less formal conditions, which afford them a greater degree of control.

One advantage of Learnerships, therefore, consists in the retention of the valuable right of dismissal. In good firms it is seldom or never exercised. The mere threat is

sufficient, and even that is not always required. The boys know that their employment, wages and chance of learning depend on their behaviour and progress, and for this reason are on the alert to make the very best of themselves, and for many it is good that they should be so situated. Instead of being careless and lazy, they have every inducement to do their best, and in such circumstances a learner will often come out of his time a better workman than a boy of equal ability who has been a bound apprentice.

Secondly, trouble as regards wages is more easily avoided. In Apprenticeships they are frequently a fixed amount for each year irrespective of the progress and conduct of the boy, and learners are more often paid "what they are worth." In this way the payment of the latter can be more easily arranged so as to give them every inducement to do their best and yet not cause them to sacrifice their chances for immediate high earnings. Similar methods are sometimes adopted in the case of apprentices, notably, as in the Printing Trades, by the payment of good conduct money as an addition to wages: but with them a fixed or unvarying rate is a frequent cause of difficulty.

Again, Formal Apprenticeship is very well calculated to enable a good employer to make the best of a good boy; but at times it fails very badly, either assisting exploitation by unscrupulous masters or producing lazy or incompetent apprentices. With no binding agreement, on the other hand, the former has at any rate to teach sufficiently well to induce learners to stay, since otherwise they can always leave and go elsewhere. They must reach, therefore, at least a certain minimum standard, whereas under Apprenticeship they may be in a position to teach much or little, according to their inclination. Similarly a boy has to make sufficient progress to induce the employer to keep him and to avoid dismissal. By the necessities of the case, therefore, he has both to be taught, and himself to learn, at least moderately well. Thus the worst failures of Apprenticeship are avoided.

Finally, Informal Service, being far more elastic, is better

suited to those trades in which circumstances necessitate a change of firm after a few years. Not very many will bind for less than five and often they require more. Thus an informal contract is less likely to stand in a boy's way, either when he has learnt all that a shop can teach him or when he sees a real chance of bettering himself. The master cannot legally keep him ; there are fewer formalities to be gone through ; and a good firm will usually be willing to help him to improve his position, when the proper time comes.

Both methods receive considerable support. The Printing Trades are almost solid for Apprenticeship, the Engineering, Building, and, on the whole, the Art Metal and Instrument Trades favour the less formal arrangement. The latter, therefore, appears to cover a wider area. Excess of restriction in one case must be set against deficiency of it in the other. On the one hand, Learnerships may limit the power of an employer to teach his boys thoroughly or cause him to dismiss them for slackness ; on the other, they may lead them to spoil their own chances by not sticking to their work. In several ways, therefore, the learners are rendered liable to long spells of unemployment, and these are perhaps the worst danger which a lad can incur.<sup>1</sup> Against this is the fact that the binding character of an indenture is apt to produce lack of energy and application on his part or to lead to his exploitation by unscrupulous employers.

These last difficulties, however, are far more marked in trades where Apprenticeship has to compete with other methods. Where, as in Printing, it is almost the universal rule, they are far less serious. Its success in its present form, therefore, depends largely on the possibility of applying it consistently throughout a trade. Where this is not possible, there are two alternatives, either to regularize still further the engagement and teaching of learners or to simplify the form of indenture and make more easily available the right of breaking it for misconduct on either

<sup>1</sup> Thus one Instructor said : " I advise a boy to put up with almost anything rather than that."

side. In this connexion the question of Indentures and Premiums may well be considered a little more fully.

The main trouble is caused by the difficulty of breaking an Apprenticeship. To do this, at the present time, resort to a magistrate is required. Legally it may be possible to avoid this by a special clause in the indenture ; but the fact is not generally known and the law on the point is so vague that reference to a jury would probably be necessary in any case.<sup>1</sup> The boy, therefore, must be brought up in the County Court, from which employers are deterred by the time, expense and publicity involved, the more so as the chances of a favourable verdict are not good. Most magistrates, weighing the danger of ruining a boy's career against some temporary loss and inconvenience to the employer, will, except in cases of the most flagrant misconduct, give the former the benefit of the doubt, or, at least, will very strongly recommend that he should be given another chance. Many employers, therefore, prefer to make the best of a bad bargain rather than resort to the law.

The remedy lies in facilitating the breaking of indentures, and even now a few firms actually modify them in this direction. In one case a clause was inserted to make the engagement "terminable by a week's notice on either side," and in another to make employment depend "on good behaviour," whilst in a third the indenture was drawn up, but not actually signed by the firm till the expiry of the Apprenticeship. These devices, however, have their disadvantages. Where, as with the firms just quoted, an employer's methods are above suspicion, they are perfectly fair conditions ; but unless the boy has corresponding rights, they might, if generally adopted, be abused by unscrupulous men, though, as a rule, it is easier for him to get out of an unsatisfactory bargain than for his master. The latter, indeed, is frequently in the dilemma that he may be saddled for years with an unsatisfactory lad if he does

<sup>1</sup> See J. M. Myers' *The Law Relating to Apprentices*.

bind, or that he may lose a good one, just as he is becoming valuable, if he does not.

There is one arrangement, however, which is not open to the same objections, namely that utilized by the Apprenticeship and Skilled Employment Associations. They make themselves a fourth party to the indentures which they bring about and retain the power of cancelling them upon due cause being shown by either of the other parties to them. Further, their knowledge of each case, incomplete though it may be, is greater than that of a magistrate. They can thus prevent the worst cases of exploitation and set right quickly those small troubles and misunderstandings which otherwise cause so much harm, whilst in the last resort their power of breaking the indenture is equally accessible to both sides. These powers they have used with good effect, and they might with advantage be given to the Juvenile Advisory Committees of the Labour Exchanges, and thus made to cover a far wider area. Some such extension, indeed, seems to be the best way of meeting the difficulty, though the right of utilizing this process would have to be limited to Apprenticeships made through an Exchange or other recognized agency.

Unlike the indenture, the payment of premiums has to a great extent been abandoned, and in many cases their survival is largely the result of chance or accident. Except in one or two trades where they are retained for special reasons, the great bulk of employers do not ask for them and even refuse to take them. Thus a very large firm of Builders said :—" We are prepared to take a boy and do what we can to teach him, but, owing to the changed conditions of the present day, we always refuse to take a man's money for doing so." The reference was mainly to the influence of machine production, but the statement applies equally to the tendency of modern industry to replace a contract to teach by a wage contract for work done. Having abandoned the premium and paying higher wages as well, the employers now undertake rather to give " opportunity to learn," and it is a common practice to take shop or

factory boys with "a chance to learn the trade." Another reason for refusing, or at least not asking for, premiums is a result of the trouble which those who have paid one often cause. It is significant, too, that in Printing, in spite of the general survival of Apprenticeship, the taking of them is strongly discountenanced by nearly all good offices. Elsewhere they are usually returned in increased wages or in the form of other privileges, and are not as a rule required in the case of sons of the workmen employed by a firm. One very large concern, indeed, keeps all its openings for the latter and demands a large payment from others, mainly in order to discourage outside applications.

There are, however, special circumstances in which premiums are taken. Thus, there is the articulated apprentice, the son of a manufacturer, merchant or professional man, who pays perhaps £200 or £300 in order to fit himself to become an employer. Again, in some large firms, in addition to learning a trade, the premiumed apprentices are put through the Draughtsman's Office and perhaps given a general insight into the business. Many of them are sons of foremen and leading hands. Other shops never ask for a premium, but if the indentures are made by a City Company or Apprenticeship Charity,<sup>1</sup> and carry a premium with them, they will accept it; and a cause of complaint against some Apprenticeship Associations is that they have paid one with their boys to firms who otherwise would never have dreamed of demanding it.

More frequently, however, the payment is made in return for special privileges, as by the Jewish Board of Guardians to compensate the employer for excusing the boy from work on the Jewish Sabbath. Skilled Employment Committees stipulate in their indentures for time to attend Technical Classes during working hours, and special inducements are sometimes offered in order to place a physically defective, or even an unsatisfactory, boy. The premium-hunter and the exploiter who regard these payments as a

<sup>1</sup> In one case a firm coming into possession of such a premium handed it over to the boy's father to buy him tools.

useful source of income need not be further described. They must not be confused with that class of small shops which honestly carry out their contract and teach their apprentices well, but insist upon a premium, though usually a small one. Taken as a whole, indeed, premiums are not sufficiently general to influence either way the value of Formal Apprenticeship.

Before leaving this matter, it is interesting to compare the general attitude towards it in trades like Printing, where it is almost the only method in use, with that which is found in others, where it is far from common. In the former its working meets with general approval both from employers and employed. A certain number of complaints there must be, but they are far fewer than in other trades. More than one of the men's leaders, indeed, informed me that there was little reason to complain of the way in which the boys were taught, whilst the employers do far more than in most industries to encourage attendance at Trade and Technical Classes. Much of the credit for this belongs to the Trade Unions concerned and in particular to the London Society of Compositors which has established in the biggest offices "chapel committees" to look after the interests of the apprentices and to ensure their fair treatment. These trades, it is true, are in some ways well suited by Apprenticeships, but the fact remains that masters, foremen and men alike agree as to the general excellence of the teaching. Such abuses as exist are neither serious nor widespread and are diminishing rather than increasing. Nor do the masters complain of the conduct of apprentices in the way that is frequent elsewhere. There is, in short, a general desire to uphold the system and all parties to it appear to show unusual readiness to meet each other's views.

Very different is the state of affairs in the Building Trades, in which, with one possible exception, Formal Apprenticeships are not numerous, whilst in many firms they have been, or are being, replaced by employment "during good behaviour." The employers complain of the behaviour of

the boys, and the workmen of the employers, and the apprentices themselves are 'discontented. Nor do the results appear to be at all good. Frequently apprentices turn out less well than those who have not been bound and indentures are apt to be used for purposes of exploitation. Nor do the alternative methods give real satisfaction. Under them also boys fail to learn properly and employers complain that they go off elsewhere just as they are becoming useful. In Printing universal Apprenticeship sets up a common standard and a common rule, and the standard is a high one. Here spasmodic Apprenticeship completely fails to do anything of the sort, and it is to be feared that it is being abandoned by firms of good class and getting more and more confined to those of a less desirable type.

The value of Apprenticeship lies not in its mere existence nor in its form and rules, but in the definite standard of teaching and conduct which it enforces upon teacher and taught—in its application to Industrial Training of what Mr. and Mrs. Sidney Webb have called the "device of the common rule," which in this case is a tacit understanding rather than a definite regulation. Still, where this exists, it is none the less enforced, since it creates a Public Opinion in a trade to which the normal firm conforms. There is a known and accepted standard upon which each Apprenticeship is tacitly based, and where there is such a thing, those who depart from it are more quickly detected and more successfully checked, and abuses, being more clearly seen, are rectified with far greater ease. Where, however, one man takes bound apprentices, a second learners and a third improvers, things are different. What is perfectly fair under one method may be grossly unfair in another, but such unfairness is less easy to detect or stop, because there is no one accepted standard, by reference to which it can be measured. Again, this standardization of teaching has its value in keeping before both parties, and before the boy most of all, the fact that he is there to learn. There is no alternative method by which he can earn more but learn less, and so the idea of learnership is insisted upon. Just

because it fails to set any standard, therefore, the value of spasmodic Apprenticeship is comparatively slight, and to get the best of any system universal enforcement of it is needed throughout nearly the whole of a trade. It should be added that if it is sufficiently general Informal Service can similarly set up a standard. This appears to be the case with the Verbal Agreements in Engineering. Such a standard, indeed, will have to be less definite and cannot in the nature of things be so systematically enforced.

As contrasted with Migration, however, both Formal and Informal Service possess in a high degree the fundamental merit of Regularity. This is especially true of Formal Apprenticeship where employment is not merely regular *de facto* but subject to fixed conditions. Against this must be set the disadvantage arising from insufficient variety, which is perhaps most marked under an Indenture, since its terms are the most difficult to alter. Learnership is far more elastic and at its best combines both these fundamental necessities, whilst, under Migration, the gain in variety is often more than counterbalanced by its irregularity. Still even with Informal Service there may be some loss in variety, though not a very great one.

As a method of teaching, Migration has many advantages, and for the abler boys it may even prove to be the best of all, provided always that they are properly looked after by their parents. On the other hand, it is more than proportionally dangerous to those of less ability. Its supreme merit is that, under ordinarily favourable circumstances, it gives great variety of work. The boy who has moved about from one firm to another has seen far more of the trade and its methods than he who has stuck to a single one; and many acquire greater self-reliance from working under such conditions. Similarly it possesses perhaps to a greater extent even than Informal Regular Service, the merit of making a boy depend on himself for his advancement, and so more alert, wide-awake and attentive. For under Regular Service his place is secured for him provided he does sufficient to keep it, but the Improver has not only

to do this but at the proper time to find himself a new one and to secure for himself a position that will give him better work and higher wages.

Again, his earnings will probably be greater whilst he is learning, but this is not an unqualified advantage. It is well enough for the sensible boy, who recognizes that immediate earnings are not everything and is determined to learn. But it is often the smartest and most promising who succumb to the temptations. Clever boys are apt to learn one sort of work very quickly and then be content to make 25s. or 30s. a week at it, forgetting that a tradesman should be worth considerably more. As workmen, therefore, they are of less value than they ought to be and such special skill is far more likely to be rendered useless by some industrial change than is the all-round capacity of the fully competent mechanic. Still Migration, taken as a whole, does give the benefit of higher earnings; and if, in this respect, its disadvantages are sometimes more marked than its advantages, it has at others a peculiar value.

More even than Informal Service it meets the case of the able children of poor parents, or of those who require high immediate earnings because of the illness or prolonged unemployment of the father. At 14 a capable boy may easily earn his 8s. or 10s. a week at simple jobs without losing all chance of learning a trade, and even if he fails to do so, the alternative in any case would have been low-grade work. Again, to some extent, Migration gives a wider choice. The rudiments of many trades are very much alike—as, for instance, in the different branches of wood or metal work; and a boy beginning at one may easily find a better opening in another and so eventually be better suited. Under Regular Service, on the other hand, this is not possible, except by special arrangement.

Finally, Migration is in certain trades almost a necessity, since, where the subdivision of product is carried beyond a certain point, Regular Service throughout the time of learning is a mistake. Where a boy learns all that a shop can teach in two or three years, and this is only part of what he

needs, he must move elsewhere in order to acquire the rest. Such a state of affairs is common in the Cabinet Trade, and wherever specialization of process or output is carried very far, and, again, where some shops employ a surplus of youths and others can find room for them as improvers. Thus it is often possible to acquire by Migration the whole of a trade when this cannot be done so effectively by Regular Service, and in all these cases what is required is not an attempt to re-establish the latter where it is unsuitable, but to organize this alternative. In short, what is needed is not Regular Service, but Regulated Migration; and the attempt to secure regular employment for learners in a series of different jobs is one of the most important of the tasks which awaits the Juvenile Labour Exchange.

The case for Migration, therefore, depends partly on its merits and partly on its necessity. It serves the more capable and sensible of the boys who adopt it as well, or better than, any other method. But, as at present organized, its success depends too much on the possession of more than average ability by those who utilize it. Boys, as a rule, are not capable of looking after themselves, and whilst some who are not manage to "get there somehow," many fail from lack of control or guidance. It is sometimes said that the smart lad will succeed under any method, however bad, and the bad one fail under any other, however good. It is by its effect on the average boy, therefore, and on those who can succeed with care and attention, but not without, that a method must be judged, and the result of this test is not favourable to Migration. The dull, plodding boy, the smart unbalanced one, the boy who needs keeping up to the mark, the careless, the grumbler, and the irresponsible, will all be unduly exposed by it to the danger of failure: and the number who do fail will be unduly high. At the same time, many of these failures are due less to the method itself than to neglect to organize it, and it would appear capable of such organization as would remove or diminish its most serious blemishes.

Moreover the industrial conditions that usually accom-

pany Migration are themselves peculiarly dangerous. Nearly all the trades in which it flourishes are much affected by general depressions of trade, by seasonal slackness, and by the casualization of employment. Further, single businesses in, for instance, the making of electrical machinery have ups and downs of prosperity and slackness, quite apart from the general conditions of trade, and both boys and men are taken on and put off as occasion demands. There is thus apt to be what Mr. Beveridge calls a Reserve of Labour in the case of boys as well as men. This state of affairs is particularly marked throughout the furniture trades, though here the better-class firms retain mostly some form of Regular Service. Where Migration prevails, therefore, many of the boys have of necessity to make constant changes of work which often lead to considerable spells of Unemployment.

But the method tends of itself to produce these results, quite apart from trade conditions, and sometimes quite independently of them. Of necessity, learning by Migration involves change of firm from time to time, and therefore increased liability to unemployment. In fact, where there is marked subdivision of employment, this is quite unavoidable. But in other cases also, improvers are employed to work at a particular job and, when they have learnt all they can at it, have to find themselves another if they want to learn more. The most successful, indeed, often get job after job with little or no loss of time, but, taking one year with another, the rank and file usually lose a good deal: and the danger of this is undoubtedly far greater than with Informal Regular Service.

Moreover boys are left without supervision or a regular job just when they need them most. The older improver who has served for three or four years in one firm is better able to look after himself, but to the younger ones steadiness, discipline and control, for the time at any rate, are more essential than variety. One great danger is that a boy will learn only part of a trade or drift from one trade to another without mastering any. As a result of being unemployed,

he may throw up the one he is learning in despair and either try to enter another or take unskilled work. Again, from an employer's point of view such an improver is necessarily engaged and paid as a wage-earner and not as a learner. Hence it is no one's business to teach him, and what he can earn comes gradually, but necessarily, to fill a larger and larger place in his outlook, till he loses sight altogether of the other thing, and may even leave a good trade at which he is getting on excellently for better paid unskilled work ; and when, as not infrequently happens, the abler boys succumb to this temptation, the loss is all the greater.

Finally, the actual teaching that he gets—as apart from the experience—is frequently not so good as with Regular Service. Though a few firms make a point of bringing them on, improvers are usually left to do the best they can for themselves and obtain their knowledge as they may. They do not get the advice and assistance of experienced men in the same way that a learner does. Thus they are very liable to acquire wrong methods of working that are difficult to eradicate, and may even permanently lower their value. “My objection to improvers,” said one foreman, “is that their knowledge is picked up in the gutter. There is no continuity, and in between whiles boys work at casual jobs, and this way of learning is responsible for overstocking the trade with half-taught labour.” Again, the method involves the continual “swapping of shops and foremen,” so that the improver is under no one man's control for long, and a foreman “won't take the same interest in a boy another man has been training as in his own.” This is only natural, and its results are frequently unavoidable, but they are none the less serious.

Such are the disadvantages of Migration, and whilst many of them are inherent in the method itself, they are immensely aggravated by the conditions under which it exists. The migratory improver works under no definite rules, nor is he under any direct guidance. He is generally regarded as a person who looks after himself, and he is left to do so. Having refused or been unable to get Regular

Service, it is assumed that he can take care of himself and does not need control, whereas, in fact, he really needs it more than the apprentice or learner does.

Of these last the former has a definite place to work at for a definite time, settled conditions, and a clearer objective before both himself and his employer. The learner, again, though there is no binding agreement, gets much the same thing in practice. Where contracts are not carried out, therefore, the problem is to enforce them. With the improver any organization for this purpose has still to be created. For Migration to a great extent involves the absence of any guarantee either of regular employment or of teaching. The improver is only paid for as long as he is required or chooses to stay. His difficulties, therefore, cannot be dealt with by fixing conditions over a long period. Because he has to be continually changing his job, they are peculiarly severe : and the only feasible method of dealing with them is by careful control and supervision of individual boys, in short, by Juvenile Labour Exchanges and After-Care.

If and when created, this organization will reduce to a minimum the disadvantages of Migration and correspondingly increase its merits. Of the former, one of the greatest is the danger of Unemployment and Casual Labour. To meet this one of the chief objects of the Exchange should be to arrange where possible a series of consecutive jobs, and other means can be taken to meet such periods of unemployment as are inevitable. Again, the Exchange, the After-Care Worker and the Technical Instructor can all assist, both in advising when to make a change of firm and where to go ; and as a result such changes will probably become less numerous. The improver will work, in short, in fewer firms for longer periods. The average boy, again, will not, as hitherto, be left alone to look after himself ; whilst the conditions of acquiring knowledge can be modified, partly by a fuller use of the Trade Schools, partly by inducing employers to put their improvers upon a more definite footing as regards teaching. In time, perhaps, a system of

definite engagements for shorter periods might be established, thus reviving in a modern form something resembling the "annual hirings" of the Statute of Artificers.

There is, therefore, for the time being at any rate, both the need and the room for all three methods—Apprenticeship, Informal Service, and Migration—each with its requisite organization and its separate sphere. At present, indeed, they are not kept distinct, but compete with one another, sometimes even within a single form, and with disastrous effect. For these conditions make it difficult to get the best out of any of them and accentuate the evils and abuses of all. Thus, to recapitulate briefly, casual Apprenticeship cannot standardize teaching over a trade or district, and it is this standardization that gives it its chief value. Such a standard is of necessity inapplicable to firms that follow other methods, and the lower requirements of these tend to conceal the abuse of its terms by those who adopt it. Such abuse, therefore, flourishes more readily where the method is only occasionally utilized. Finally, as is illustrated by the case of the Building Trades, all hope of getting the best out of it is destroyed by the growing discontent with its conditions both among employers and apprentices.

Again, its presence in this form has probably prevented the alternative methods from being as well organized as they might have been if they had stood alone. The higher standards have been associated only with Apprenticeship, and for this reason those required under the less strict rival methods are lower than they need, or should, have been. The most palpable difference between Informal Service and Apprenticeship is that the former does not possess the fixed rules of the latter, or at least not so many of them, and insistence upon this difference has tended to retard its better organization. For similar reasons, the real difficulties and dangers of Migration have been obscured. The ignoring of the fact that the improver needs more actual control than either the apprentice or the learner is largely due to the idea that some form of Regular Service, and especially of Apprenticeship, is the proper method of learning any trade.

Against the evils of Migration people look back to the re-establishment of the old system under conditions that do not suit it, rather than forward to the proper organization of the new : and by failing to adopt the right policy, they fail also of the only present means of achieving success.

What has to be faced, in short, is the fact that, whilst in time a single uniform system <sup>1</sup> may be developed, the existence of several methods side by side is inevitable both now and in the immediate future. Whilst, therefore, each of them has its separate sphere which it can serve better than any other, trouble arises because they are not kept separate, but contest the whole field to their mutual loss. Consequently, to make the best of each and all of them some line of demarcation is essential. It is not necessary that one system only shall be admissible throughout a whole trade, since different ones may suit different branches of it. Cabinet-Making, for instance, might have Service in West London and Migration in the wholesale trade. But it should be possible to distinguish spheres of influence throughout which a single method shall be applied with some approach to uniformity, and at least to put a stop to the existence, side by side, of two or more within a single shop. Under present conditions the employer is not to blame, but a change would probably be as advantageous to him as to the boys. In some cases, however, a combination in the form of Short Service followed by Migration may prove to be the best solution.

The establishment of such an organization will undoubtedly be both slow and difficult, but the germ of it already exists in the Juvenile Labour Exchange. Few things are more necessary. So long as several methods mingle together, either the raising or the enforcement of any standard will be difficult. With separate spheres of influence, each can have the regulations suited to it and its own "Common Rule." It will obtain also its own public opinion to enforce their observance ; and to get a thing accepted is the first step towards getting it improved.

<sup>1</sup> Probably in the form of Short Service followed by Migration.

Regarding the other two methods, it will be sufficient to sum up the conclusions of previous chapters. The same confusion which affects Service and Migration is to be found in them, though modified somewhat in the case of Following-up by certain of the conditions that accompany it. Both of them, however, stand somewhat apart from the others—Following-up because it applies to a limited group of trades possessing distinct methods of working, and Picking-up because it is concerned altogether with a lower grade of labour.

In Following-up the first few years are passed in a labourer's position, serving one or more mechanics, after which a youth gets the tools and makes his way, sometimes in a single firm, and sometimes by movement from one to another. The conditions, especially the mingling of methods and their results, are often very similar to those already described. Nevertheless, the danger is somewhat less, first, because after some years as an assistant a youth is better fitted to look after himself when changes from firm to firm become necessary, and, secondly, because even if he fails to rise further, he has a semi-skilled job as mate or hammerman to fall back upon. There is still, however, the danger on the one hand of creating a class of half-taught mechanics, the "good mates spoilt," who are neither the one thing nor the other, and on the other the risk that some who are capable of better things will never rise beyond an assistant's job. Following-up, moreover, has another defect that is peculiar to itself, namely, that it is liable to overstock a trade with mechanics because it is just a chance how many mates will become such, and sometimes more will do so than an industry can find room for. Some of these employments, again, either are, or are liable to become, Partial Blind Alleys. Like other methods, therefore, Following-up requires an organization specially suited to its particular needs. Like them, however, it does not as yet possess it.

Picking-up, on the other hand, is frequently found in employments whose demand for labour is such as to enable them to absorb some who have hitherto worked in Blind Alleys.

In proportion many of them employ older youths far more than boys. They are easy to learn, can often be learnt later in life, and therefore are well fitted for those who have not quite sufficient capacity to become artisans. But the ease with which they are entered, and left, and the haphazard methods of acquiring them, cause many to drift into them and out again, till they grow up either without occupation or with no proper grasp of one, and in any case without learning application or discipline. Here, therefore, the need is to put the right boys to these employments and keep them under a steady control, so that the best may be made of them in work suited to their capacity.

Finally, these several chief methods—Apprenticeship, Informal Service, Migration, Following-up and Picking-up—have also to be organized in combination, as well as individually. Each has, as its separate sphere, certain trades or branches of them. But they must also be regarded as parts of a single whole. It is not enough merely to organize the teaching of the skilled trades, but all boys from the most to the least capable must be put to some occupation, and the right boy to the right occupation. This, at least, is the ideal, and whilst the possibility of applying it to every individual is doubtful, the nearer this can be approached the better it will be. Again, the abler boys must go to the skilled trades, the moderately competent to the semi-skilled, and the least gifted to the unskilled, whilst similarly a broad distinction can be made between those suited for manual and for clerical employments. Moreover, they must be put not only to learn the right trades, but to learn them in the right way, not necessarily by any hard and fast rule, but by a well-ordered care and control. Whether they are to be compositors or dockers, they should grow up regular, disciplined, and intelligent men ; and to ensure this they must be suitably placed and kept steadily at work, and, when a job fails or is likely to fail, must be helped and assisted to another. This, perhaps, is a high aim, but only so will our alleys cease to be blind and the organization of boy labour become thoroughly efficient.

## CHAPTER IX.

### THE START IN A TRADE.

Second Problem is the Method of Training in Detail—Its Importance—Importance of Original Selection of a Trade—Extent of this Problem—Variation in Methods of Selection adopted by Employers—Absence of Method—Failure to guarantee more than Character and Physique—Comparatively Small Number of Failures under Regular Service—Natural Selection by Promotion of Boy Labourers : Its Value ; Its Disadvantages.

From the Boys' Point of View—Two questions—How to find a trade ?—How to get a job ?—Second often answers First—These matters generally left to Individuals—Work of Schoolmasters and others—Absence of Co-ordinated Scheme for dealing with them—The Juvenile Advisory Committee—Choice of an Occupation—Vague Ideas of parents and boys—Finding a Job—Popular Trades—Failure to test boy's capacity or influence his choice. Difficulty of Discovering Prospects of a particular trade. Extent to which boys have places to go to—Tendency to take first decent opening—Trades often discovered only after they have started to work—Insistence on a job being obtained at once—Justification for this ; its Danger—Difficulty of Finding a Particular Place, contrasted with frequency of jobs with no prospects—Unsuitable Trades—Lack of expert advice for working-class parent—Its Results—Social Reasons for choice of a trade.

Influence of Wages on Choice of Employment—Distinction between desire to start boy earning and desire to get highest possible wages—Justification for and Advantages of Former—Tendency to lead to evil result and reasons for this—Classification of Parents according to their Attitude—Preponderance of Boy Labouring over Skilled Work very great at fourteen—Errand Boys' jobs a Natural Opening—Bad Results of present conditions largely due to Want of Information—Wages in good work higher than is usually supposed—Frequency of Insistence not on highest possible wages, but on a certain Minimum Amount—Justification of this attitude—Deliberate Preference for high wages over prospects a later growth—Reasons for this—Disastrous effects of lack of information combined with peculiar industrial conditions of London.

So far, what has been considered has been the question of entry into different trades, or how boys get into them to begin with, and how, having done so, they work their way up to become journeymen. The operation of these different methods in detail, or how the boys are actually taught, constitutes the second of the three main questions of Industrial Training, and is of scarcely less importance. For in good hands an inferior system may work very well indeed and in bad ones, as with some cases of Formal Apprenticeship, the very best method can be made an engine of abuse. Indeed, the best teaching is sometimes given in those firms which refuse to take any responsibility for providing it. The subject, therefore, has now to be treated from a somewhat different standpoint, that, namely, of the arrangements actually made for teaching the boys. Even so, however, the old demarcation still holds, that under *Regular Service* a boy gets taught or at least gets a definite opportunity to learn, and under *Migration* has to teach himself and find his own opportunities. In dealing with this branch of the subject, moreover, it is necessary to include not only the years in which a boy is actually engaged in learning, but those which elapse before he starts to do so, or, in short, his whole life from the time he leaves school until he has either acquired an occupation or definitely failed to do so. The matters with which it is concerned, therefore, are numerous and include Choice of a Trade, Age of Entry, Wages and Earnings, Work in the Shop, Relations to the Employer, and Technical and Trade Schools.

Since a boy's start in life affects his whole career, the selection of his future employment is of vital importance, and cases of unsatisfactory teaching are frequently due to an initial mistake in this matter or to the way in which lads have spent the one or two years which may have elapsed before they start to learn. The special difficulties of London—its huge area and scattered character, and the irregularity of much of its work—intensify existing evils; but, great though they often are, it is necessary to guard against exaggeration. A recent report of the Birmingham Education

Committee estimated that in that city a quarter of the children between fourteen and seventeen who had attended the Elementary Schools, needed constant care and supervision during adolescence owing to the inability of their parents to look after them, and that the remainder needed at most only occasional advice or assistance. Thus under existing conditions about one in four appeared to be in real danger of having their future prospects injured. In London the proportion is likely to be appreciably greater, and others are likely to suffer from causes which only begin to operate after they have reached the age of seventeen. In both towns, moreover, some who do not need continuous, will require occasional, supervision.

The future of many will be influenced, for good or evil, by the various methods of selection which employers adopt. Many firms are careful in their choice of learners and apprentices and obtain them from various sources. Preference is frequently given to sons, brothers, or nephews of men working for the firm, and competent workmen can usually place their boys in this way, though some of them prefer to put them into another trade or shop. Those employers, however, who take few learners often get more by this means than they can find room for. Others obtain them in the general course of their work—from firms with whom they do their business, by the recommendation of customers, and so on. Thirdly, many Head Teachers of the Elementary Schools do a great deal to find positions for their boys and applications are made to them when one is required. A few are also obtained through the clergy or workers in clubs. Again other employers, more particularly in Engineering, only take learners at sixteen and insist on the continuance of their education up to this age, whilst some of the Day Trade Schools are building up a connexion among firms of repute in their industries. Finally, many shops, without getting them from any particular source, will carefully test their fitness for the business.

Even the most careful selection, however, can in many cases guarantee only character and general physique, and

that it does not always ensure industrial fitness for the particular job is shown by the failures that still occur. A boy of fourteen or fifteen frequently does not know his own mind and sometimes his bent is not apparent when he leaves school. The usual probationary period of from one to three months is often too short, and comes to an end before the keenness due to the novelty and excitement of starting work has worn off. Again, an employer sometimes feels bound to take a lad against his better judgment, as, for instance, when an old and valued workman insists upon it, or he may only be able to offer an opening in a trade other than the one the boy desires, and this his parents dare not refuse. The result in each case is that the mistake is only discovered when it is too late. A big firm can occasionally transfer a lad to a more suitable branch of its business, but this is not common. Usually an employer is afraid to turn him adrift and so keeps him and makes the best of him, and he never becomes a competent workman.

Even where the boys are carefully selected before engagement, therefore, there is likely to be an appreciable number of failures ; and where they are not, it is usually very much greater. Now a deliberate choice is, as a rule, only made in the case of those who are definitely taken on as apprentices or learners ; and even with them only in some firms, and more often in the large than in the small ones. Chance plays a much bigger part in the promotion of boy labourers. With Migration the improver is engaged and paid as a wage-earner and is put off if he fails to earn his money ; and with Following-up it is largely a toss-up whether a mate possesses the capacity, or obtains the opportunity, to rise. What happens is that in each case the better boys gradually learn the trade and learn it successfully, others either leave it altogether or fail to become competent. Hence trouble arises not only because the wrong boys are sometimes selected, but because those who are not selected have their chances spoilt.

Two classes of employers have to be distinguished, those who make a deliberate practice of promoting the best of

their boy labourers, and those who simply raise to the bench the first who happens to take their fancy. There are many of the former and the jobs of the glue-boy in Joinery and Cabinet-Making, and of the errand boy in Silver-smithing provide an avenue into a trade for some of them at any rate. So too some printing and stereotyping offices apprentice the abler of their errand boys. Now this policy has many advantages from the employers' point of view. To see boys at work is often the most efficient criterion of their fitness for it ; and by taking the pick of them, a wider choice is possible. Moreover, it gives what is often their only real chance of rising to clever children in poor circumstances who must start earning at once. On the other hand, a succession of incompetent and unsuitable boys may be both troublesome and expensive, and this is even more liable to happen to those who leave matters to take their course. On the whole, however, employers of both kinds succeed in obtaining sooner or later the lads they require, though they may not always get a really suitable one, as distinct from one " who will do." It is true that the number of unsuccessful speculations is likely to be comparatively large ; but this is little more than an ordinary trade risk.

Matters are far less favourable when we look at them from the boys' point of view, and especially when we consider, as we must, not only those who do get the chance to learn but those who do not. It is not all employers who will take trouble about them, and for this they themselves are sometimes to blame. " We find room for a good proportion of our boys," said a leather manufacturer, " but some of them are so rough we cannot make anything of them. They won't ever be and do not want to be anything better than unskilled labourers." Their failure to stick to their jobs often increases the difficulty of providing for them, but this restlessness itself is in part the creation of the conditions under which they work. Thus the latter help to spoil their prospects, both by creating character and habits that are unfavourable and by causing them to waste their time in a succession of boys' jobs till it is too late to learn a

trade or even an occupation of any kind. So the difficulties are increased from the first and the chances biassed against them by the haphazard methods of selection that are adopted, and what may at worst prove a not very serious loss to the individual employer may be ruin to them.

Hence in choosing their vocation boys are hampered at the very outset. How they make this choice must now be considered; and two distinct, though allied, questions require an answer, first how do they fix upon a trade, and secondly, how do they find an opening in it and obtain their first job? Often, indeed, the reply to the second question provides the answer to the first, as, for instance, that a boy chances to get a certain job and afterwards stays in it to learn the business, or that another starts out to get into one trade and abandons it for something else. The importance of a lad's first place, therefore, has to be insisted upon, since the conditions that accompany it will often mean the whole difference between success or failure, though probably it is the leaving rather than the entering of it that matters most. In itself it may be, and often is, neither good nor bad. What is important is whether he sticks steadily at it when it is a permanency or leaves it at the right moment for a better position when it is not, or whether in either case he throws it up at the wrong time for other casual jobs which lead to nothing.

This matter, like so many others, is left very much to the individual to settle for himself, and there is no well-defined method of dealing with it. Only in the last few years has any general organized attempt been made to control the placing of boys in employment. Apart from the efforts of parents and friends, however, there have existed for some time various agencies through which some of them have been provided for as they leave school. Perhaps most has been done by the Head and other Teachers in Elementary Schools, many of whom obtain positions for a good proportion of their boys, but their work suffers from certain inevitable deficiencies. Frequently they cannot test the value of a

job, nor have they always the most suitable boy to fill it, but, like the parents, have to make the best of whatever offers and endeavour to fill a good post at all cost, sending the best available. Here the Labour Exchange with its wider area of selection will have a great advantage. Above all, the teacher has neither the time nor the power for the even more important task of supervising the after-careers of his boys. The Clergy and their workers also find a certain number of places, but act under even greater disadvantages. Boys' Clubs as a rule devote more time to looking after those who are in work than to finding it for those who are not. Finally, the Skilled Employment Associations provide for a few hundreds each year as apprentices and learners and assist with advice a somewhat larger number.

Nevertheless, until the last few years, there has been no co-ordinated effort to deal with all those who need assistance. The first move was made by the Circular Letter sent out by the Headmasters and Headmistresses of Council Schools offering advice to parents whose children were leaving at the end of the following year. The re-organization of the Care Committees in 1908 saw a great extension of their After-Care work, which includes both the placing of boys and their supervision until seventeen. This was put on a still more definite basis by the establishment of Juvenile Advisory Committees under the Labour Exchange Act (1909). The number of these is now considerable and their organization is being steadily improved. The system, however, is still in its infancy.

The fact remains, therefore, that for the present and in the immediate future at any rate, the choice and finding of work will rest with the boy and his parents. What they have to do is, first, to discover what occupation<sup>1</sup> he is suited for, and, secondly, to find him a job in it—not merely, be it noted, to find him a job. Outside agencies can give far greater

<sup>1</sup> This term, as stated in Chapter I, may be used to describe any kind of employment that has a definite independent position, but includes semi-skilled and unskilled as well as skilled work.

assistance with the latter than with the former, which must always depend chiefly upon the father.

Many parents have a very clear idea what they want their boys to be and some even have a place waiting for them, but too often no thought is given to the matter till they have left or are about to leave school. Not seldom, indeed, the offer of advice by the Head Teachers is not taken advantage of. The thing is simply put off till the last minute.

A few weeks before he leaves, a boy will say that "my father (or my mother) hasn't told me yet," or the mother will inform one that, "I have not thought about it, he is not leaving School for two months, is he?" and even a few days before it is much the same. "We must see what turns up." "He must get what he can, like the others did." "The boy must take his chance," and so on. In many cases, indeed, the need for doing anything before he actually leaves is not realized, and when he does everything has to be fixed up in a hurry. Again, even when a lad has a particular thing in view, nothing will be done to find him a place in it, except perhaps that a relative will promise to speak for him. He only starts to look for one after he has left, and, whilst doing so, will very likely drop into some errand boy's job or go "on the vans" instead.

Moreover, even where his choice is not a mere passing fancy, as it often is, many a boy of fourteen selects his trade for all sorts of reasons, that have no reference to the prospects it offers or his own capacities. He selects it because, for instance, it is a "nice clean trade" like Joinery or "a respectable sort of trade" like clerking, or because a boy friend likes it and "will speak to the guvnor for me." The most implicit trust, indeed, is often placed in somebody speaking to some one else, and the matter is left at that. Further there is a fashion in trades and there are some—usually it is true the most prosperous and best paid—which every other boy wants to go into. Some of them undoubtedly give a definite opening, but certain purely temporary jobs have also a great attraction, partly because of the high wages

and partly because a boy sees so many of his friends going into them.

Throughout, therefore, a very marked feature is the failure on the part of a boy's parents to grasp the need for making any provision for him until he has actually left school, and with this often goes, almost necessarily, a complete lack of knowledge of his tastes and capacities. The cause is not so much absence of forethought as want of information and inability to realize its necessity. Hence boys are allowed to select, or may even be forced into, quite unsuitable trades, whilst when they choose suitable ones they may fail to get into them. Thus from the outset the chances are often weighted, and weighted heavily, against them.

A Foreman Joiner, employed by a well-known firm, put the matter as follows :—"A father ought to see, though he does not do so, that his son finds out what his future line in life is to be. It is easy enough to make a boy say where his taste lies. A father should make him *think about it*, grasp what the trade is and what work it does, so that he gets a general insight into it." To do this is far from easy. Nevertheless it is for their neglect in this respect that working-class parents are most to blame. Many boys indeed have no special bent for any one trade, but it is an advantage to know this; and parents could undoubtedly do more than they do to find out what a lad is fit for and what he wants to be; and after that make him learn all about it and realize what the work is and what he is letting himself in for. Where a boy does this, my informant added, he learns twice as quickly after he has started work. As it is the very contrary attitude is often adopted that "it is not what the boy wants, but what his father wants: he must take his chance like his father did,"<sup>1</sup> and in this way his chances of entering the trade he is best fitted for are spoilt,

If, however, parents fail to do all that they might in this respect, conditions are very much against them in other ways. For one thing they frequently have neither the time

<sup>1</sup> This was actually said to me by the mother of a boy.

nor the means to discover the future prospects of a trade. Many causes may be operating to contract the demand for labour in it, but these do not always appear on the surface nor are they sufficiently obvious to guide the individual workman. What is common knowledge is often inaccurate and at best behind the times. An industry may decline for some time before the fact is generally known, or again it may get much overstocked with labour during a boom, as happened apparently to the Building Trades between 1895 and 1900. Yet boys may still continue to enter it after the decline has set in. Hence as regards its remoter prospects their parents suffer from a lack of information for which they cannot fairly be held responsible.

When a boy leaves School, therefore, he has as a rule but the vaguest idea of his future calling, and little or no effort has been made to find him a place in it. With nothing else in view he frequently becomes an errand boy or messenger boy, more or less by default, these jobs being both to himself and his parents the natural opening. Sometimes, too, one finds that, like the Greek admirals after Salamis, who each put himself first and Themistocles second, lads have chosen one definite trade only and can offer no alternative to it but such a job, which, besides being a natural opening, is thus used to fall back upon when other things fail.

Again it is necessary to guard against exaggerating the extent to which things are left to the last minute. For many more boys than is sometimes supposed do contrive to have a place awaiting them when they leave School. Some go to what constitutes another kind of natural opening when they enter the same firm as their fathers, elder brothers or other relatives, though not necessarily to do the same work. Others go to a job found by a friend, who is frequently another boy already at work, and where there is a prominent local trade many gravitate into that. Even in these cases, however, a lad is often just pitchforked into the first thing that offers, without further attempts to select something that suits him. Usually the job is neither the best available nor

the one that offers the highest immediate wages, but simply the first that turns up and it may give prospects either good or bad. Here again chance rather than choice rules ; and this applies equally to those who are careful to put their sons into good trades, except that they do wait for some decent opening instead of snapping up the first that occurs. Chance, however, may very well turn out successfully and sometimes does so.

The matter is further complicated by the fact that many boys only discover, rather than choose, their occupations after they have started to look for work. Their original choice does not survive the search for it ; but in this search they often get into a position to learn something, and may even obtain openings as good as the most careful selection could have afforded. Sometimes a firm has a good place to offer, and a boy, passing in the course of his wanderings, "sees a card in the window," takes the job and learns the trade ; or again in those temporary boys' jobs that are connected with a skilled trade a smart lad manages "to get to the bench and work his way up." It is thus that the reply to the question of how a boy finds a job also answers that as to how he selects a trade.

As regards the former, again, he is once more left in a position which still further increases the influences that are working adversely to his chances. Usually when he leaves school, he is simply sent out to find a job for himself, with, it is true, some help from the rest of his family ; but, as the time the parents can give to this is very limited, it falls mainly upon himself to do the best he can with little knowledge of what he wants and less of how to get it. As a rule, indeed, he has to hunt for his work by going from street to street and shop to shop, just as any other non-employed person does, with sometimes a periodical visit to the Labour Exchange.

What he is sent out to find is not a trade, nor even any job in particular, but simply a job. His parents' attitude usually is that he must do this and be quick about it. It is put to him that he is big enough to earn a wage, and ought

to do so ; and where the home circumstances are not good the pressure to find something quickly is very great. Often there is no distinction between one thing and another and no idea beyond this of simply getting a job. The parents, indeed, are less likely to sacrifice the future deliberately than to insist on their boy taking at once some sort of place. Against this attitude his usually indefinite ideas are not proof. He is made to understand that he must get something and not miss a chance, and that the other thing can be seen to later. The working-class parent is oppressed, often unduly so, with the difficulty of finding a boy work at all, and therefore, fearing that he will get nothing, hurries him into the first thing that turns up.

It is only fair to remember, moreover, that to get a boy as quickly as possible into decent work of some kind is often the wisest course. Early unemployment is perhaps the worst danger than can beset a young worker, and quickly gives him a taste for street loafing and casual habits. Indeed, many experienced persons think that, unless he has some marked capacity for a particular trade, and sometimes even then, it is best for him to take the first decent job that offers and then look about him for something better. This will keep him steadily at work from the outset, and encourages habits of regularity and discipline ; and to their value many parents are fully alive.

The real danger is that where this course is adopted with something better in view for the future, the matter will not be followed up but things will be allowed to slip, and eventually nothing will be done. A boy wants to be, say, a carpenter, but, being unable to find an opening at once, becomes a messenger or errand boy, and finally the matter is dropped and forgotten altogether. Or again, having got one boy's job easily, he finds it as easy to get another at slightly higher pay and thus acquires the habit of continually changing, so that, sticking to nothing, he learns nothing. The real cause of the trouble, however, lies less in the actual taking of the first job than in the results that often follow from this, and these in their turn are accentuated

by the failure to find out what he needs before he leaves school.

Of the many causes of the abandonment of the vaguely desired trade for the ubiquitous errand-boy's work, the most potent has still to be mentioned. Even where a certain trade is kept steadily in view, there is still the very great difficulty of finding a place in it, which is enormously increased in London by its vast size, the scattered character of not a few of its industries and often by the large number and small size of the firms engaged in them. It is difficult, if not impossible, therefore, for the parents to know what is offering even within a comparatively small area, and in the really good jobs there are many boys and few openings. A lad, in short, may be vainly seeking what he wants, whilst a few streets off an employer may not be able to get a suitable one for just this kind of job, and, to make matters worse, parents have neither the time to look for an opening nor the knowledge to discern its real value when they do find it. The boy naturally knows neither where to look nor how.

On the other hand, Blind Alleys, offering good wages but poor prospects, are everywhere; and as the search for a particular thing becomes more and more hopeless, the feeling grows that he must not go on hanging about the streets and doing nothing, and the boy gives up the attempt and takes labouring work, hoping still for something better to turn up. Not getting what he wants, he falls back perforce on whatever he can get. The better chance that he hopes for may never occur, and is perhaps forgotten, and instead of leaving his work to learn a trade, he may stick to it until it leaves him.

Or, again, he may find an opening in a skilled trade, but not in the one he wants, and yet neither he nor his parents may dare refuse to take it. Even in labouring work this fear of missing an opportunity is very strong, and with skilled employment it is much increased by the fact that the chances of learning a trade seem so few. Thus a father in this dilemma often prefers to put a boy to one which he

does not like rather than run the risk of not placing him in one at all, and sometimes the results are disastrous. Finally, even where the trade itself is the right one, the shop may be unsuitable. It may only have an inferior quality of work, or may use so much machinery that it cannot teach the trade properly, or its general treatment of its boys may be bad. But the ordinary workman has no sufficient means of finding this out, and is not likely to unless expert advice is put within his reach. At present it is difficult for him to get this.

Thus even where far greater care and foresight is shown by the parents than is usually the case, there are still great difficulties which may very well lead to disaster. Industrial conditions and lack of method, therefore, combine to produce it. Two cases may be given to illustrate this state of affairs. A young Silversmith told me that "I saw the silverware in a salesroom window and thought it would be a good trade to go to. Now I find trade to be fluctuating and wages none too high." He appeared, however, to like the work and in that way was getting on all right. Again, an Heraldic Decorator's Apprentice got his job through an advertisement. "My mother saw a coat of arms over the door and thought that was the sort of work I should do and what a fine trade it would be." After going there, however, he found that the firm had got the worst name in London. "As soon as you say you come from . . . well!"

Finally, many boys choose their occupations carefully and deliberately, but choose them not for industrial, but for more general, reasons. By this I mean that the deciding factor is not their capacity for the work but the social position it gives or the general conditions under which it is carried on. My experience in two South London Schools threw an interesting light on this point. In them the bulk of the boys want to go into four or five things, clerical employment, engineering, printing, messenger work and, to a lesser extent, woodwork.

The fondness for printing was due to the large amount of it done in that neighbourhood, the numerous offices providing some real openings and some highly paid boys' jobs.

Messenger work, again, is a natural opening taken by the more thoughtless or used to fall back upon if other things fail. Moreover there is a fashion in trades, and at present Engineering is decidedly the fashionable one, and for this reason many boys choose it. "Every boy wants to be an engineer nowadays," and every ambitious mother wants her son to be one. Electrical and motor engineering are the most favoured branches, though to many the term signifies almost any kind of heavy metal work. A few who make this choice possess real capacity for it, but more are fitted for it neither manually nor intellectually. The number of boys in the lower standards who want "to be an engineer" is quite significant.

Clerical labour and woodwork illustrate another form of this tendency. The choice of the former bears witness to the desire for an advance in social position and to a real attempt, however misdirected its character, to think out a lad's future. The "cult of the black coat," the eagerness, that is to say, of many artisans to put their sons into such employment, is still marked, though perhaps less so than formerly. The hope of a better social position than that of the artisan is in part justified, since many branches of it give better pay or prospects and usually greater security. On the other hand its lower grades, partly because of the numbers who have entered them, are poorly paid and overstocked with labour. The trouble is accentuated because boys who are obviously unsuitable are put to the work. There are, however, signs of a reaction against this view and of attempts to make artisans of those who ought to be clerks. Similarly woodworking is chosen because it is "a nice clean trade," or "a respectable trade," though this tendency is not so marked as might have been expected in the two schools in question. Thus it is inevitable that there should be a certain further number of misfits when reasons of this kind determine the choice of occupation.

Finally it is necessary to consider what part is played in the selection by the wage to be earned. Here two things have to be distinguished. First there is the desire of the

parents for their boys to start earning as quickly as possible, and secondly the demand, so often attributed to them, of high immediate earnings at all cost. These may be described respectively as the legitimate and illegitimate attitude towards the question. After all the beginning of a boy's industrial life does mark the beginning of his earning power; and this is how he regards the matter himself. "Earning," wrote a Committee of the London County Council in 1906, "looms larger in his imagination than the more laborious and less remunerative learning," and naturally the time when he leaves school is to him the time when he will begin to earn, just as it is to children of the middle classes. And up to a point he is right. At school he only learnt; at work, even when he is learning, he is also earning.

Nor need the desire to get a boy earning some wages at once necessarily involve a demand for the highest possible, still less the sacrifice of his future prospects. Often comparatively moderate rates are accepted without demur if there is a good opening, and many jobs, which give at least a chance to learn, pay much higher wages than is generally supposed. The boy, as already stated, is told to get a job and do it quickly, the attitude being that "it is time you are earning as you're a big boy now, so don't hang about doing nothing." He is often, it is true, left to do the best he can for himself, but where there is an opportunity to learn and reasonable wages are offered, an extra shilling or two is not allowed to stand in his way.

Moreover, for the reasons already given, it is often wisest to get him into work as quickly as possible and give him time to look about him. But here, again, the danger lies in the consequences of this rather than in the thing itself. Having got the job for so much money, he finds he can get another for rather more, and so acquires the habit of considering only the wages; and thus he gradually loses sight of any ideas of learning he may previously have had.

In most cases, therefore, the real trouble does not originate in insistence upon high earnings or "the big shilling," at least not in the first instance. It is due rather to lack of

information, to the difficulty of finding an opening, and once again, to much want of thought. Indeed there is sometimes not sufficient of this even to produce any definite choice of higher money earnings in preference to better prospects. The matter is simply not thought about at all till the boy leaves school, and then he takes the first thing that turns up, and as, at fourteen at any rate, Blind Alley jobs are far more numerous than any others, it is heavy odds that he gets into one of them. This is confirmed by the experience of Skilled Employment Associations. They find that those who put their boys into such work simply from ignorance of its character and of the other available openings, are far more numerous than those who select them purely for the sake of the high wages. Here again, the difficulty lies rather in that great lack of information upon which I have attempted to insist. Boys are wrongly placed because their fathers "do not know."

As regards their attitude, therefore, parents seem to fall into the following classes. The first consists of those who succeed in finding decent openings for their boys, and the second of those who insist upon getting large, if not the largest, possible wages at once, corresponding to the lads who, as one employer said, "have no ambition to be anything beyond unskilled labourers." A third class is made up of those who are too poor to do anything else. Hence if their sons show real ability jobs ought to be found for them in which they can get good money at once with a chance later on to work their way up. It is more especially the elder children who are affected in this way, since their earnings often give the younger ones a better opportunity. Fourthly, there are those who desire to put their sons to a good trade and try to find something for them, but fail to do so and then allow them to get whatever they can; and last, and perhaps most numerous of all, those who simply take the line of least resistance, doing nothing until the boy is fourteen and then taking the first job that offers, and that probably one with no prospects, since there are so many of these.

Moreover to put a lad to a boy's job pure and simple,

even though it leads directly to nothing further or better, is in many ways the natural thing for the wife of a labourer or even of an artisan. Quite apart from household needs, it is for many a necessity, simply because at fourteen there is nothing else available for them. Many skilled trades do not take their learners until sixteen and some of these have to fill in the interval at some kind of labouring. Moreover, taking all kinds of work together, the great majority have, between fourteen and fifteen, to do this. This may be illustrated by the numbers returned by the recent census as occupied between these ages in certain important boys' jobs and in some of the chief Industries <sup>1</sup> :—

**EMPLOYMENT OF BOYS BETWEEN FOURTEEN AND FIFTEEN.**

| BOY LABOURERS AND BOYS' JOBS.    |                   |                 | BOYS IN INDUSTRIES (excluding Dealers). |                   |                 |
|----------------------------------|-------------------|-----------------|---|-------------------|-----------------|
|                                  | County of London. | Greater London. |   | County of London. | Greater London. |
| Messengers, Warehouse Boys, etc. | 8,848             | 12,905          | Engineering and Metal . . .             | 1,042             | 1,780           |
| Government Messengers . . .      | 939               | 1,345           | Precious Metal and Implements           | 345               | 517             |
| Vanguards . . .                  | 1,475             | 1,903           | House Building .                        | 264               | 470             |
| Office Boys and Junior Clerks .  | 1,564             | 2,398           | Woodworking and Furniture . . .         | 533               | 796             |
|                                  |                   |                 | Leather . . .                           | 177               | 229             |
| Total (4 groups) .               | 12,826            | 18,551          | Total (5 groups) .                      | 2,361             | 3,792           |

Thus the groups in the first table contain considerably more than half of the boys between fourteen and fifteen years of age employed in the County of London. Some of them, it is true, are undoubtedly in positions in which, given good conduct and capacity, promotion to the bench is probable ; but this is partly offset by the fact that some of those returned under the skilled industries are doing

<sup>1</sup> Exclusive of those returned as dealers.

work that offers no prospects. This table, therefore, thoroughly bears out the statement that if there is a plenitude of jobs there is a paucity of good openings.

For a mother to put a boy to a Blind Alley, in short, is as natural as it is often necessary. Probably her own people, brothers, husband and so on, all began life running errands or as vanguards, and many of her neighbours' children and of her son's own friends are thus occupied. There are so many of such jobs going, and so many boys going to them, that it becomes the obvious course to take, either at once, or at least when other things fail. Many a woman, indeed, will hardly know of anything else that is more than a name to her. What occurs at once is that "the boy might be an errand boy or a messenger boy." For she does know what these are, and what the work is, and still more that they fetch 6s. or 8s. a week.

So too it is with other boys. As described, their first choice may well be a trade of some sort, though messenger work is also popular. But if this proves impossible, they go quite naturally into some boy's job, which has probably been their only alternative. Then in time many of them come to forget their original objective, including some of those whose capacities were equal to their ambitions. For instance a boy left School wanting to learn a trade. Nothing had been done and he found himself a job in a paper warehouse. The lad possessed considerable ability and his mother was spoken to about the matter and promised to ask him, but did not do so; and as he himself was quite happy where he was, and had said nothing more about his trade, nothing more was done.<sup>1</sup>

Broadly considered, therefore, the fact that the Blind Alleys are so plentiful as to form much the most natural thing for a boy to go to, shows clearly how large a part want of information plays in determining for a parent the relative importance of different matters connected with a job. These include the wage to be earned, the conditions of

<sup>1</sup> An actual case.

employment, its influence on the boy, and the prospects for the future. All should be considered ; but often only the first one is because it alone is realized, whilst the others are not. The money wage touches the working-class family at every point and so is not likely to be forgotten. And it ought not to be, for it is one of the things to be taken into account, though not the only one.

The trouble arises because in many cases even the existence of the others is not realized. Some parents hardly grasp the fact that different places give different prospects, and others who do are quite unable to distinguish between the good and the bad. Indeed good pay and good prospects sometimes go together. A big shop paying 6s. a week may give a chance to learn : a small one offering only 5s. may not. A lower wage, therefore, is no necessary guarantee of a better opening, though on the whole the two things vary inversely. Moreover, future prospects are indefinite and vary from shop to shop, and even where their importance is realized, there is in many cases no certainty as to what they will be in a particular job. Often only a chance or opportunity is given, and not a guarantee. The one thing, in fact, that is clear and definite is the money paid, and so this settles the matter. "The boy must take his chance like his father did before him," or "he must take what he can get like all the others did," and if lack of prospects is pointed out, "perhaps he will be one of the lucky ones who will be kept on." Or again he may be allowed to please himself. Indeed it is not possible to deny that chance of this kind will sometimes turn out better than the most careful arrangement.

Want of knowledge, therefore, is the main reason why immediate wages play an unduly large part in the choice of employment. Where there are several things of equal importance, and only one of them is really known, that one must obviously receive more than its fair share of attention ; and so it does here. Deliberate sacrifice of prospects for the sake of the largest possible money is, in my opinion, comparatively rare though not unknown, and the

choice is apt to be too haphazard even for this. The boy just goes to the first decently paid thing that offers. The great matter is for him to get something, and into something he is put as quickly as possible without waiting to look for anything with either better pay or better prospects.

What one does find in some cases, however, is that a certain amount of money is demanded, and provided that it is offered, parents are prepared to sacrifice if necessary the chance of a higher rate. This holds good, moreover, of families in which considerable care is taken in placing the boys. Here, in fact, there is a sort of standard rate or minimum wage for a boy of fourteen, which parents can and will accept but for which they will stand out. Usually it is 5s. per week, and a higher sum is not insisted upon. It is not uncommon for a mother to "want to put the boy into something that will last him for life, but a few shillings a week will be useful," and the two things are not always incompatible. Many jobs that give prospects will give this amount to start with, more particularly to a smart boy, especially where employment is "on good behaviour," or where he works on the errands, or partly on them, partly at the bench. Indeed, except in a few trades and a minority of firms in others, a learner ought not as a rule to need to start at less; and as already stated, lower wages are no necessary guarantee of better prospects. To ask for a certain wage, therefore, is a very different thing from demanding the maximum obtainable; and up to a point the wisest course is to aim at a certain reasonable minimum. For the sacrifice of wages to prospects is only prudent when the object is not otherwise obtainable; fairness to the other children demands that it should not be made without due cause.

But, if rare at this early stage, deliberate preference for higher wages over better prospects frequently grows up later as a result of the influences at work. The absence of definite methods of putting boys into trades helps to push the idea of learning into the background, even where learners are employed, and often their position is rather

that of boy labourers who are given the chance to learn if they show capacity. Later on again, the improver is paid according to "what he is worth" and teaches himself as best he can. Now all this tends to hide or keep in the background the need of learning something. Being thus taken on to work, and, if he can, to learn, a boy soon comes to demand his full value and to see that he gets it. Similarly he takes the first decent job that offers without any idea of sacrificing his prospects, but, having done so, he and his parents soon get into the habit of looking first to the wage to be earned. So from one Blind Alley job he quickly goes to another and yet to another. Or, if he is learning at all, he may make himself perfect at one thing and try to get as much as he can at that. To begin with there is often a clear intention of learning, but too often the habit grows up afterwards of choosing jobs for their wages alone. This is the result of the conditions under which the start in life is made; and once more it is not the immediate but the ulterior consequences that are most to be feared. It is not that boys or their parents begin by sacrificing learning to earning, but that they come to do so later.

Throughout, therefore, the chief cause of disaster consists in lack of information, guidance and advice. Parents neither know what their children need nor how to get it for them; and the results are rendered worse by the absence of uniformity and the variety in methods of engagement that are such marked features of London. Many a boy leaves School with at best a vague idea of what he wants and with no situation awaiting him. He has, as a result, to be placed in a hurry and, so far, the parent is, in part at least, to blame. When he comes to look for a job, he is again without information as to what is going, or advice as to what to take or to avoid and what to do or not to do. Then London conditions render his search difficult, dangerous and often hopeless. Even when started, he is not seldom left without help or guidance to look after himself; and to the many boys who must make frequent moves after new and better work, this lack of guidance is peculiarly disastrous. Alto-

gether the start in life of a London boy is beset by many dangers ; for his need of information and assistance is often great in proportion as the amount of them that he obtains is small.

## CHAPTER X.

### CONDITIONS OF ENGAGEMENT AND EMPLOYMENT.

- (a) *Age at Starting in a Trade.*—Usual Age of Leaving—Influence of Length of Service on Time of Start—Reasons for Late Start—Special Reasons : Work too heavy for young boys ; Dangerous Trades ; Responsible work ; Increased Use of Machinery—General Reasons : Preliminary work in trade at boy's job ; older, stronger and more experienced boys preferred—Boys of fourteen still preferred sometimes—Reasons for this—Frequency of engaging boys at fourteen without putting them direct to the trade—Chance often determines the matter—Boys do not always know their own minds—Definite answer impossible.

Should a boy go direct from School to his trade ?—Reasons for—Reasons against—Not always possible—Use of temporary jobs in such cases.

- (b) *Suitability.*—Difficulty of testing this—Means of doing so adopted by employers ; Their limitations—Periods of Probation—Boy labourers engaged with view to ultimate promotion—Selection of abler boy labourers for promotion—Value to employer of power to dismiss under Informal Service.

Fitting right boy to right trade—Less difficult than is supposed—Marked capacity for a few trades only somewhat rare—General capacity frequent—More important distinctions : Clerical and Manual Work ; High and low-skilled labour—Selection should follow these broader lines.

- (c) *Period of Service and Time taken to Learn.*—Period varies according to a number of influences—Effect of changes in methods of production on period of service—Little reduction in general skill—No uniform period of Service—Variations in practice of Trade Unions and of employers—Three Common Arrangements : Seven years, Five years, Till twenty-one—Five years most common—Growth of Shorter Apprenticeships—Reduction in period no new thing.

Time taken to learn usually about seven years—Often longer than mere teaching requires—Increase in Wage Contract : boy cannot spend whole time learning—Influence of Subdivision of output—Time wasted by both these influences.

Question of reduction in general skill—Proportionate increase in semi-skilled labour—Probable reduction in unskilled—

Skilled labour has gained in level of skill what it has lost in range—Greater gradation of skill but no decrease—Net time spent learning probably shorter—Time spent before and after service—Trade has now to be learnt more thoroughly—Probably no decrease in general skill—Each grade requires more skill than formerly, but is often less well taught.

- (d) *Preference and Heredity*.—Their meaning ; Preference is not a right—Less Common for Father to teach his son ; Cases where it occurs—Forms of Preference given by Employers—Extent to which it is given—Complete refusal rare—Reasons why not taken advantage of.

Heredity less marked than elsewhere—Exceptions to this and their causes—Illustration from Boys working at Trade Schools—Trades in which it is common—Reasons why men put their boys into other trades.

- (e) *Wages*.—Small difference between learners and labourers' wages in London—Methods of Wage Payment—Fixed Time Rates ; Their Different Forms—Good Conduct Money—Varying Time Rates ; Common in Building Trades—Piece Rates ; How paid ; Illustrations.

High Boys' Wages in London—Approximation of Learners' to Boy Labourers' Wages—5s. a week obtainable at fourteen—Exceptions—Wages in different trades—General Evidence—Evidence of Board of Trade Enquiry into Earnings and Hours—Evidence as to boys starting at 5s. or less in United Kingdom and in London.

Rate of rise year by year—From 2s. to 2s. 6d. a year most common—Enormous variations in wages earned in last year of service—Rise in learners' wages in recent years—Fears of parents baseless—Proper means of meeting them.

WHEN a boy selects a trade or gets his first job, a number of conditions are settled which have an important bearing on his future career. These may now be treated under five main headings and in the following order, namely :—

- (a) Age at Starting in a Trade.
- (b) Suitability for a Trade.
- (c) Period of Service and Time taken to learn.
- (d) Preference and Heredity.
- (e) Wages.

(a) *Age at Starting*.—With this are closely connected the questions whether or not a boy goes to his trade direct from school, whether he can be put straight to something

that will keep him throughout life, or, if not, how the gap between elementary and industrial education is to be bridged. In London the school leaving age, which is fourteen, is higher than in many other towns, half-time is almost unknown, and exemptions are not common, the Labour Certificate being granted only to boys above thirteen and in the 7th and ex-7th Standards. On the other hand, the number who remain at school after that age is probably above the average. Nevertheless the vast majority still leave at fourteen, and we have to consider therefore how far a boy can and does go at that age direct to the occupation he is to follow through life.

The practice in this respect varies very much and is largely determined by the length of service required and the use and disuse of an indenture. Legally, a contract of Apprenticeship cannot be enforced against an apprentice after he reaches his twenty-first year, and so some firms prefer to get their boys direct from school in order that they may have served seven years before attaining it ; but where Apprenticeships of this length are not the custom, there is less object in doing so. Most of the employers who use indentures, however, try to arrange for them to be terminated at or before twenty-one, but there is no hard and fast rule. The age of starting, therefore, differs from trade to trade and firm to firm, and is usually between fifteen and sixteen and sometimes rises as high as seventeen. Some Trade Unions allow entry until then but not later. Fifteen, however, is perhaps the most common, though a number of reasons delay the start in many cases until sixteen.

In some trades, indeed, it is difficult if not impossible to start a boy as a learner before the latter. Where the work is laborious, a strong lad is wanted and one of fourteen will not do. Thus in Plumbing he has to do mate's work, which is usually heavy and requires at least a youth's strength. Only the smaller shops which "get nothing but one-inch pipes," as one Foreman Plumber said, can employ one usefully. Normally the work will be too hard.

This is even more true of Smithing, where young boys are almost useless for the hammering. Again in boilermaking they are engaged as heaters at fourteen, but not at the more responsible work of carrying till sixteen. Similarly, they will not in some cases be employed because the work is dangerous. In sawmills, for instance, they "pull-out" at fourteen, but do not work machines till much later. In the fleshing of hides and skins, in which a sharp two-handled knife is used, seventeen is the age for taking apprentices, and in bricklaying youngsters will not be employed as learners on high buildings.

So, too, where a job requires special responsibility or discretion, only older lads will be put to it. They may, perhaps, be put to do boy's work about the shop as soon as they leave school, but will not go to the actual work of the trade until later. Again special reasons cause the taking of learners to be deferred. Certain restrictions, for one thing, on the employment of very young boys may cause their engagement to be delayed until sixteen; or, as in Joinery, the increased use of machinery for the simpler and rougher work leaves less for them to do, and such jobs as they can still be given are found to be too heavy for them.

These influences specially affect individual trades; but there are also some general ones which tend to create a gap between elementary and industrial education in all alike. There is an increasing substitution, for bound apprentices or for the more definitely engaged learners, of lads employed first on boys' jobs who, if they show aptitude, are promoted to the bench. Sometimes this is practically another way of starting to learn a trade, and some employers advertise their vacancies as such. By others, however, only the ablest are kept on, and the rest have either to find an opening elsewhere or, not liking the particular trade, leave it of their own accord. In favour of this practice are the facts that it often gives a more real and definite trial of a boy's capacity and inclination and that they themselves have time to find out what they really

want. This is not always possible when they are taken as learners direct from school.

Moreover, apart from this, there is an undoubted tendency to raise the starting age. The boy who has been about a bit and got a little experience is often preferred as possessing more sense of responsibility than the one who has just left school. He is beginning, too, to realize his future and is less likely to "get larking about." Further, even if no great strength is required, those of fourteen are usually small and therefore of comparatively little value, and, if they are small for their age, they are specially difficult to place, whilst, except in trades requiring fineness and delicacy, the preference for a strong chap "who can turn out plenty of work" gives them little chance.

There are, however, some reasons which still cause many employers and foremen to insist upon having their boys directly they leave, particularly in some of the more highly skilled trades, and in Printing the insistence on a seven years' Indenture to terminate at twenty-one, or soon afterwards, makes this inevitable. First whilst some lads have a greater sense of responsibility at sixteen than at fourteen, others, who have been allowed to run wild in the meantime, are distinctly less amenable to discipline than when they were younger, and also have often forgotten much of what they learnt at School. Moreover, where a trade requires both intelligence and manual skill, it is better to get hold of them at once before the influence of long hours of monotonous and uneducative toil has had its effect. Hence many firms find boys to be most teachable and most able to learn at the earlier age, and some Foremen refuse to take those who have been elsewhere or have left their first place so soon, considering them to be "rolling stones."

It is a nice question, therefore, which pays the best, and the answer depends very largely on the class of work they have been doing. The boy who has been in a post that has exercised his wits and intelligence and has been well looked after at home, may have benefited by discovering during the interval his real bent and by possessing a strengthened

sense of responsibility. Others, on the contrary, may have deteriorated, may have lost their power of application by running wild, or have had their intellect dulled by drudgery. A firm's policy, therefore, will vary with its experience ; and some who do not take learners till fifteen or sixteen, insist on their having remained at school till then, and in the Engineering Trades a record of two years at a Secondary or Technical School is sometimes required.

Moreover, some employers get their boys at fourteen with the full intention of teaching them a trade, but do not at first employ them to work as learners. They make themselves generally useful and are practically on probation for a year or two. One large firm of Builders and Contractors, in particular, does this systematically. Boys are definitely engaged as probationers for two years at 5s. a week and are taught a trade at the end of that time. Usually each workshop has two of them, and a few more are employed in other parts of the business. They do not necessarily remain in the department in which they served their probation, though they often do so, and some of the foremen prefer it. These, and others similarly situated, therefore, do in a sense go direct from school to their trades, though they do not begin to learn them at once, and their case is somewhat different from the often haphazard promotion at a later age of the more capable boy labourers and of those the employer likes. Yet another cause of an interval between leaving and starting to learn is that, where few learners are taken, applicants will have to wait for a vacancy to occur.

Finally, whilst many large and some smaller shops adopt a definite policy, others leave the matter more or less to chance. An employer simply waits until he wants a boy and then advertises. He takes the first eligible one, who is otherwise satisfactory and not obviously too old or too small for the work, and thus chooses the most suitable lad whatever his age. Hence it is sometimes an older, and sometimes a younger, one who is taken. This is even more true of those who afterwards become improvers. They get to know a little about something, perhaps after working at

several other jobs first, and having at last hit upon a trade, get work at it at the best wage they can ; but many of them are not able to do this until they are sixteen or even older.

Like that of the employers, the experience of the boys themselves varies. Some know what they want and have a job to go to. More know neither what they want nor how to get it, and spend a year or two finding it out. Hence some who are qualified to speak prefer that a boy should not try to enter a particular trade at once, unless he knows his own mind very clearly, but that he should take the first decent job that offers and find out what he really likes. Some, indeed, sample three or four before they hit upon the right one, which they learn very successfully. This, indeed, will be inevitable, so long as many of them continue to start work without knowing what they are fit for. Others, again, are compelled to take work that is well paid and obviously, if they are to go to a trade, they must do so later, since their circumstances make it impossible at first.

The question as to the usual age of starting to learn, therefore, hardly permits of a definite answer. Frequently both employers and learners leave it to chance. A firm wanting a boy gets the best one it can, whatever his age. A boy goes on finding himself jobs till a happy chance puts him in a position to acquire a trade and he does so. The starting age, therefore, varies from fourteen up to about seventeen. Sometimes, notably in plumbing and smithing, boys are not usually taken until sixteen and at others fourteen is the rule. Some employers prefer an earlier, others a later, start but this at least is obvious, that many boys do not go direct from school to their trades, at least to learn them, and the fact that many are employed first as labourers before being employed as learners further complicates the matter.

Should a boy therefore who is to learn a trade go to it straight from School ? That he should get a job and go to work as quickly as possible is obvious in order that he may avoid the very great danger of early unemployment. So far, in short, the parental instinct is a sound one. The

danger, as described in the last chapter, is that if he enter a Blind Alley, he may stay at it instead of going on to something better and thus reach manhood without any definite occupation at all.

There is much to be said, indeed, for getting a boy started at once in a particular trade. In this case he is definitely in work that will last him through life, provided of course that the shop is a decent one, and that he has selected the right craft. He has had no time to forget what he learnt at school, and is most amenable to discipline. Moreover, he is not left to run wild and is less likely to acquire casual and irregular habits or that of continually changing his job.

To set against these advantages, however, there are several objections. Placing a boy in a trade at once often renders any adequate trial of his capacity difficult, and makes it practically impossible to employ him first on trial about the shop, as a boy labourer, which is perhaps the best test of all, and sometimes the best thing that can be done. Secondly, many leave school without knowing their own minds, and thus the attempt to provide for them straight away may cause them to select something at which they cannot succeed. This difficulty, it is true, ought not to arise : but it will continue to do so for so long as more effort is not made to discover their bent whilst they are at school. Lastly, the thing is often impossible. Fewer chances to learn are available at fourteen than at fifteen, and fewer at fifteen than at sixteen. In short, the opportunity for many does not and cannot come until later. To put all boys in permanent situations at fourteen, therefore, is impossible, and the attempt may be disastrous. For failure to get anything but a Blind Alley job may make boys think that nothing better is available, and so cause them to give up all idea of learning a trade. Rather they should, where necessary, be led to look upon their first few places as stop-gaps to occupy their time till something better offers, so that they may keep their attention fixed on the latter.

The question, therefore, is a very open one. Where a

boy can be put immediately to learn something for which he is suited, it should by all means be done, both when he has some special bent and when he possesses that general capacity which is likely to succeed at anything. This, however, is not always possible : and even where an opening is available, it is better for many to wait where they can safely do so. The danger consists less in putting a boy into a Blind Alley than in leaving him in one without help or guidance. It is the latter that he needs most, for if he gets them the problem will probably settle itself according to the circumstances of each case. Where suitable openings offer, boys can go to them at once. Otherwise they can be put into temporary work which they know to be temporary, to await the time when something better will offer. Two objects will thus be served. The boy will be safely and usefully employed in the meantime, and a Blind Alley, while he is at it, will cease to be such, and will form a connecting path along which eventually he will reach his trade.

(b) **Suitability.**—Closely bound up with this question is the further one of the means adopted to select boys as apprentices and learners. The difficulty of testing their suitability in the first few months after they leave school, when almost any form of wage-earning is novel and therefore pleasant, encourages the use of employment during good behaviour and in temporary boys' jobs as a probation. Without one of these devices a real test may be difficult, the more so as many parents do little to find out their boys' inclinations ; and so the selection must otherwise be a leap in the dark.

First of all we may consider the means which employers adopt for their own protection. Not all of them by any means go to any special trouble in choosing learners, and many simply take them as they come. Much of what is to be said, therefore, will apply only to those who do. In their case, care is taken to know first of all something about their boys' characters and antecedents. Either they are sons and relatives of employés, which gives the firm a special hold over them, or they come with recommendations

from various business connexions, or are introduced by the men. Other employers get good references with all the lads they take, or, as one of them put it, "know all about our boys before we bind them." Many, for instance, will be first recommended as suitable by teachers in Elementary Schools. Such recommendations, however, usually guarantee their character and general capacity, but not always their aptitude for a particular industry, and upon this matter clearer information is obtained concerning boys who stay at school until sixteen, and especially concerning students at a Day Trade School. These latter, indeed, are picked lads of more than average capacity who have possessed from the very beginning a definite aptitude for certain work; and apart from them, and some few of those recommended from the Elementary Schools, little more than the good character and respectability, and to some extent the general intelligence, can be relied upon. Capacity for the trade in question has still to be tested.

Apprentices are, as a rule, taken on trial before being bound, usually for one month, less frequently for two or three, and occasionally for longer. Three months or less often prove inadequate, however, even when the boys have been carefully selected in the first place. Some employers, therefore, let the period of trial run on, and delay signing the Indentures for six months or even a year, and the Skilled Employment Associations often find it advisable to do the same. With learnerships, too, though similar trouble is sometimes experienced, a longer probation is more frequent and more easy to arrange.

Secondly, as already described, many firms engage boy labourers with a view to teaching them eventually, and will for a time employ them on the errands or in making themselves useful. Sometimes, as in the higher grades of cabinet work, where this device appears to be popular, the number of such boys is small, and room can easily be found for all of them. At others the engagement as an errand boy is for a more or less definite period of six months or a year. This form of selection, therefore, differs from the last,

because boys start first at unskilled jobs and afterwards learn. It differs from those that follow in that the firm employs them with the full intention of teaching them afterwards, provided they are competent, with the further advantage of taking away the blind alley characteristics of such temporary jobs. The use of this method might well be extended, and the efforts of the Labour Exchanges could well be devoted to this and to ensuring a better original selection of boys for the purpose.

Thirdly, as described in the last chapter, vacancies are filled by the promotion of the ablest of the boy labourers employed by a firm, who are given a chance to learn, but are not taken on with this purpose in view. Usually the labourers so employed far outnumber the vacancies for learners, or else they fill only a few of them, the rest going to ordinary apprentices or learners. In Printing, for instance, especially with Compositors and Stereotypers, a regular practice is often made of promoting the best of the errand boys, who after twelve or fifteen months are bound, their indentures being as a rule dated back for a year. Such offices, however, generally employ a large number of ordinary apprentices as well, and, since their work is highly skilled, only a portion of the errand boys, who come often from a rougher and less educated class, have the capacity for it. This policy is not confined to the Printing trade, and by its means a good many get their chance.

Finally, many firms leave matters to a process of "natural selection," pure and simple. They just take boys on without any agreement, and if they are unsuitable, get rid of them. If they are suitable, they stay and are taught, unless indeed they themselves prefer to migrate elsewhere. Such employers simply take a likely lad and put him on, and sooner or later they get one they like and teach him. The power of dismissal protects them against others.

From their point of view this is the great advantage of Informal Regular Service, that the power to dismiss a boy, apart from the valuable hold it gives them otherwise, guarantees them against serious loss. With Apprentice-

ships there is always an element of chance at the best of times. Some firms are very successful in getting a very good type, others are not, and the gains on the best who can be kept are offset by losses on the worst who cannot be got rid of. The matter is even more of a lottery with those who simply advertise and take what they can find, when frequent misfits are inevitable: for even where more care is taken, the means of testing the applicants often prove inadequate. Here again Juvenile Exchanges and After-Care workers will probably be able to give great assistance.

At the same time, the task of fitting the right boy to the right trade is less difficult than is sometimes supposed. Marked capacity for one or two things only is comparatively rare, and many lads possess a general aptitude for manual work that enables them to learn many kinds of it with success. Otherwise the fate of the very large number who want to be engineers and nothing else, would be sad indeed, but happily most of them settle quite comfortably into another trade. Perhaps a positive dislike, or even a physical incapacity, for certain industries is more common than a special fitness for them. Often it is largely a question of health—to keep consumptive boys, for instance, out of employments liable to cause phthisis, those with delicate chests from wet outdoor work, and those who are weak or small from heavy labour. Otherwise lads only suited to one or two jobs are very common, and a special bent of any kind often accompanies marked general ability.

Such distinction as there is, indeed, usually follows broader lines than those of single trades or industries. The main division is between Manual and Clerical work, and this is often a very clear one. The two are sufficiently distinct to demand powers and abilities of a different kind, and thus boys who would make good "tradesmen" may very well fail as clerks and vice-versa. Much is written about the prejudices felt by many parents for clerical employment and of the resulting mistakes, but similar failures are caused by the attempt to make mechanics of those who are unsuitable. Errors of the first kind are, per-

haps, more numerous ; but those of the second are not uncommon. Anyhow as between manual and clerical occupations there is often marked variation in aptitudes. Most boys fall definitely into one or other of these classes, and the problem is to put each into the right one. A third and smaller class consists of those whose special bent is towards work with the pencil—drawing, design, draughtsmanship, and the like.

Another important distinction is that between different levels of skill and capacity, according as they are fitted for highly-skilled, semi-skilled or unskilled work. Often, however, their own choice will not correspond to this. Ex-VII may wish to go as an errand boy, and Standard V to be an engineer, and much waste of good material would result if they were allowed to have their way. The able boy would be thrown away on low-skilled labour, and the dull boy become the half-taught, underpaid and casual mechanic, of little use to himself or any one else. This distinction, again, is a clear and useful one. It is possible to find out a boy's capacity, so as to guide him into the right sort of work, and this will often mean going beyond the schoolroom, since backwardness here may accompany decided manual capacity. When, therefore, this has been properly tested, boys can be graded accordingly.

It is on these wider lines, in fact, that their bent needs to be discovered and tested, and beyond them the chief point of importance in selecting a trade is with many to get them into a suitable place, and then keep them steadily at work in it. This will apply not only to the future skilled worker, but even more to those who can only hope for semi-skilled or unskilled jobs. Almost always the vital thing is to do this, and to prevent them from drifting from one job to another. The average boy is usually fitted for many things and a slight preference for one over another may be of small importance compared with steady and regular application to whatever it is.

(c) **Period of Service and Time Taken to Learn.**—Like the second, this third problem is closely connected with the

first, since length of service depends largely on the age at which it begins, being probably five, six or seven years, according as it starts at sixteen or earlier. Again a boy who is bound at the later ages may already have learnt a little of the trade, or at least, by working at some labouring job connected with it, have obtained some preliminary knowledge which one of fourteen takes time to acquire. So, too, the period of service will not always be sufficient for the boy to learn the whole of his trade. Nevertheless, modern conditions do frequently make it difficult to acquire it completely in a single shop, and the shorter period which is sometimes stipulated for in the Indenture meets this difficulty by allowing the extra year or two to be spent in finishing the training elsewhere. Sometimes special short Indentures are arranged to procure this. Finally the conditions accompanying the less formal Regular Service, and still more Migration, may necessitate a longer period than formal Apprenticeship would require.

The whole problem is greatly affected by alterations in methods of production and by the development of the wage-contract, under which boys are paid their value as workmen and learn as best they can. The former has in some cases reduced the amount of skill needed to the semi-skilled level, but does not necessarily mean that a whole trade thus loses its skilled character. Sometimes it does so, as in some parts of the manufacture of light leather, where improvements in machinery have very greatly simplified matters. In book-binding, again, publishers' work has been divided into a number of semi-skilled jobs, whilst the other branches remain as skilled as before, and in some other trades only certain sections of the work are affected, and that chiefly in the larger establishments. Some of the machine-men in engineering may be quoted as an instance of this. Or thirdly, the development of an industry may create new semi-skilled processes which did not exist before. In every such case the result is that for these processes the old period of training ceases to be required, since the new kinds of work can be learnt in quite a short time, and a new grade of labour partly or wholly replaces the old.

Secondly, changes in methods of production influence other trades in various ways, but without producing so marked an effect. Sometimes they have limited the skill required, and at others have merely altered its character or changed the mode of acquiring it. With some of the commoner and cheaper work much less of it is now needed, more particularly where, as in joinery and cabinet-making, the parts are prepared so completely by elaborate machinery that they only need to be fitted together by hand. This, however, does not apply to the better-class work to anything like the same extent.

A more frequent tendency of machine production is to produce a concentration of skill, the work done covering a narrower range but reaching a higher level. Greater rapidity of execution, fineness, and accuracy are needed, and these compensate for any loss in other directions. An elementary example of this is found in the separation of fitters and turners in large engineering establishments. Again, as also in engineering, a reduction of manual skill may be compensated for by the need for increased intelligence and a higher level of technical and scientific knowledge. Thirdly, the use of machinery may even increase the dexterity needed by taking over the simple processes and performing them more quickly and with fewer men, but requiring greater skill in its manipulation than the handwork did. This so far has been the result of the introduction of the Linotype in Printing.

Lastly, less may have to be learnt and yet the trade be more difficult to learn than before. The simpler and rougher processes are usually the first to be taken over by machinery, and when they are done by hand, many of them are the natural things on which to start a boy. Thus the later ones are more difficult to learn now that this stepping stone to them has been removed. Hence in these various ways changes in method of production, resulting from the use of machinery and other industrial developments; frequently alter the character of the skill required instead of reducing its amount ; and if the creation of new processes is omitted,

the extent to which the latter has taken place is not very large. Thus on the whole changes in methods of production do not seem to have reduced appreciably the length of time required to master a craft. Consideration of the effect of the wage contract must be postponed until after that of the actual practice of to-day.

Turning to this, therefore, we find no uniform period of service, and London conditions appear to render the application of one to all industries impossible. Moreover, there is no uniformity even in each separate trade and sometimes different lengths of service will be adopted for different boys within the same firm. The age at which an indenture was signed often settles the matter, and as boys start at different ages, their service varies accordingly.

Trade Union policy also fluctuates. Rules are most strict in Printing. The compositors enforce successfully the full seven years, and the lithographers have a rule to this effect, but in practice accept five. With the machine-minders and stereotypers the full seven years are strictly adhered to and both these bodies have been successful in securing this. But otherwise the longer period is seldom enforced, among the Unions that require it being the journeymen carriers and the paintbrush makers.

Perhaps the most common policy is to demand a minimum of five years, but to raise no objection to six or seven. Some of the smaller societies, including that of the Brushmakers, require five years' actual Apprenticeship, but most of the Unions follow the example of the Amalgamated Society of Engineers and accept five years' work at the trade, and in practice this condition can be satisfied in different ways. With the engineers, the requirements of the Board of Trade for the Sea-going Engineers Certificate help to maintain the predominance of regular service in a single firm. The boiler-makers also fix five years in a single shop, but in certain cases allow the apprentice a further twelve months, in which to get his full money. Many Unions, however, either do not possess any rules on this subject, or leave them to be arranged by the different localities, and in the London

District no stipulation appears in the working rules of most of the Building Trades.

There is no great uniformity in the methods favoured by employers, but three different arrangements are common, namely seven years, five years, and until the learner is twenty-one. Periods of six years are sometimes found in individual shops, but are not common. The habit of binding till twenty-one is popular in some large Building firms and is not uncommon elsewhere, and where it exists it produces much variety of practice even within a single firm. Service for seven years is markedly predominant in Printing, but otherwise only in a few small and highly skilled trades like saddlery and coppersmithing, and in the higher branches of some others, notably bookbinding, whilst elsewhere it is adopted by a few individual employers, either because they are doing particularly good work or for special reasons.

On the whole, however, five years is undoubtedly the most favoured period. It certainly is so in engineering, where a good many firms, chiefly the larger ones, do not take their boys before they are sixteen. Both in building and wood-working it is very common, the numerous small shops in the latter usually preferring it. Again, in art metal work, both such regular agreements as there are and the less definite understandings which are usual, last for this length of time. Moreover two of the most vigorous institutions engaged in placing learners—the Apprenticeship and Skilled Employment Association, and the Jewish Board of Guardians—choose as a rule to bind for five years rather than for seven.

Finally, shorter Apprenticeships, though not yet very numerous, are becoming more so and often are better suited to the new developments of industry. Boys need a wider experience than a single firm can give them, and, if bound for four years to be grounded in their trade, can afterwards obtain this in other shops. At present, however, it is only in Engineering that such a device is being definitely taken up, but individual firms are utilizing it elsewhere; and not a few who do not formally adopt it are advocating its

use, or are refusing to bind their boys at all, so that they may be free to move on after three or four years.

For these reasons, therefore, the period of service is being somewhat reduced, but this reduction is by no means a new thing. As early as 1814, a few trades were substituting five years for seven, and the tendency had spread far by the time the sixties were reached. Present conditions are even more varied if consideration is given to the time a boy actually takes to learn rather than to the length of service. So far it has only been possible to consider cases where some form of agreement exists; for obviously with Migration and Working and Learning no fixed periods are possible. In any case, except with a full seven years or with Technical Training before Apprenticeship, as in engineering, further work as an improver is usually needed before the learner can become fully competent.

Once more no general rule can be discovered, but the whole process will generally take about seven years. A few of the skilled trades require either less or more; and the time differs so much from one individual to another that, as many foremen insist, it is often difficult to strike an average between them. One boy will learn more in five years than another will in ten, but six or seven will most nearly represent this average. The lad either serves the longer period or works for an extra year or two as an improver at something below the full rate. What he has still to learn after he comes out of his time will vary, but he will probably have to perfect himself in certain things, and in any case will take time to acquire the experience and self-confidence of the seasoned workman.

Moreover, the conditions under which boys learn often cause them to take longer to do so than the mere teaching of the work would require. Perhaps the most important of these is what I have called the Wage Contract, under which they are paid as much as they are worth and left to do the best they can for themselves. This also exists in a modified form in the case of many who are engaged definitely as learners. They likewise often get nearly their full value

and pay no premium. They have, therefore, to make themselves generally useful, running errands and so on in their first year or two, for instance, in order that they may earn their wages. Hence their progress is likely to be slower. The employer cannot afford to spend so much on teaching them or to treat them solely as learners, and thus they learn less quickly than under the older conditions. Others start simply at the errands with a tacit understanding that they shall be promoted if they are capable and industrious, and yet others spend part of the day at this and the rest at the bench. In every case there is delay and the time taken to learn is lengthened, because it is not devoted solely to learning. Obviously also this obtains to a far greater extent where the boy is simply employed and paid for his work, both in the case of Migration and in that of Working and Learning under Regular Service.

This is undoubtedly one of the most important and widespread of the influences that are operating in this direction, but there is another which is scarcely less potent, namely that Subdivision of Output, which causes each firm to produce only one or a few articles. Hence to learn the whole trade, a boy must move about and work in several shops, according to the process that prevails in cabinet-making. Indeed the Wage Contract usually accompanies this, and is in some cases the result of it. For the lad is wanted not to learn, but to make a certain article, and he is paid for what he does.

These influences, therefore, lead to a considerable loss of time in learning, and this is often inevitable, not only as a result of periods of idleness between different jobs, but because those who are learning in this way often stay longer at each part of the work than they require to learn it. Either they wait until a good opening presents itself elsewhere, or, being content with their conditions, are in no hurry to leave. Moreover they cannot fit their work exactly to the need of learning a trade. They must take what jobs they can get, and the fresh knowledge each one gives will not always be in proportion to the time they spend upon it.

Finally since they are paid their full value, the employer must keep them at work on which they can earn their money, and so further delay is caused. This is, perhaps, even more true of the plumbers' mate, who has often a greater difficulty in getting an opening to start with the tools than does the ordinary boy improver; and he may continue to work for some years as such before his chance comes. All these, things, therefore, increase the time that is required to learn a trade under modern conditions, and because it is wasted, much longer is often taken than would be necessary under a more regular system.

This brings up for solution another problem. Allowing for shorter periods of actual service, and for the time that is thus wasted or otherwise occupied, does the actual learning now take longer than it used to do, or not so long? Or, to put it in another way, do the trades of to-day require a lower level of skill than formerly? On the spur of the moment an affirmative answer is often given, based on the increasing numbers employed in semi-skilled processes, on the various devices for simplifying the work of others, and on the greater separation, as with carpenters and joiners, of different branches of a trade. The question, however, cannot be disposed of so easily, and there is much in support of the contrary view.

First of all, the development of new industries has multiplied the number of trades and processes and further diversified them. Hence the additional semi-skilled workers are engaged largely on new processes or on others formed by the separation from a skilled industry of certain fractions of its work. Some direct displacement of artisans there has been, though less than is usually supposed; and semi-skilled machine-men have also replaced workers of an even lower grade, doing the heaviest and least skilled drudgery. So far, therefore, there seems to have been no great loss on balance. Probably the number of skilled workmen is larger than ever before, and that of the semi-skilled very much larger. Both, that is to say, have increased, but the latter the more rapidly of the two, and if there has been

any absolute decrease, it is probably in the lowest grades of labour. As Sir Benjamin Browne told the Poor Law Commission, "there is less room now than ever before for the absolutely unskilled man, for we specialize more." Nor must it be forgotten that some in the intermediate grade possess capacity that is not very much below that of many tradesmen. Lastly it is sometimes maintained that the semi-skilled man of to-day reaches the same level as the mechanic of a previous generation, and the latter a far higher one. This would involve a general rise in the level of skill ; and in many trades that of each particular grade is certainly higher than formerly.

Secondly, where certain processes have been taken over by semi-skilled workers, the trade affected would seem to be necessarily less skilled than before, but this ignores the important fact that the level of skill has to be taken into account as well as its range. The workman may have to do less, but may also have to do it better ; and this is what actually happens. The skilled trades of to-day require greater perfection of workmanship than they used to do—great fineness, accuracy, rapidity of output and so on. Thus, where certain forms of work are done by a different grade, or processes formerly combined are separated, there are compensations in these other directions. The higher level of skill, in short, offsets its narrower range.

Thirdly, there is greater gradation of skill than ever before, and this often produces the appearance of a decline. Different branches of a trade are getting more differentiated. For instance, when all kinds of bookbinding were done in a single firm, a man was required to turn his hand to everything. Now some shops specialize on leather binding and others on jobbing or vellum-binding, whilst publishers' work is done on a large scale by machinery. Thus there are three separate classes—highly skilled, skilled and semi-skilled, instead of only one. As a result, therefore, the level of skill appears to have declined. In reality, it is as high as before, though more carefully graded. The best workmen are confined to the best work, the ordinary skilled men to

jobbing, and so on ; and as a result every branch of it is better done than before, and those who are doing it reach a higher level at their particular job.

Fourthly, even allowing for waste of time, the actual period of service required in most trades is probably shorter than formerly, but this is made up for in various ways. Some boys are better prepared for learning before their service begins. Many of them do temporary boys' work about a trade for a year or two before it starts, and so know a good deal that an apprentice, coming fresh to it, will take some time to find out. With the longer period, both now and formerly, the younger boy spends some time making himself useful and getting used to shop conditions, and if straight from school, does not at once settle down to his work. The boy of to-day has already mastered these preliminaries and knows his way about, and thus saves himself and his employer a good deal of time.

Again, much of the simpler boys' work to which learners were first put, and which was often reserved for them, is now done by machinery ; and the fact that there are few suitable jobs to put them to, is one of the reasons why employers are less eager to take young boys. This means, therefore, that there is less to learn than formerly in the easier branches, and as much as before in the more skilled ones. Hence the training afforded by this preliminary work is no longer given, and trades so affected thus prove more difficult to learn and require older boys. In fact, learning is a shorter business, but, while it lasts, a harder one.

Finally, whilst less has to be learnt, it requires to be learnt more perfectly. Not so much time is now spent in actually learning a trade, and more in perfecting what has been learnt ; and this perfection comes gradually by practice and experience. Apprenticeships as a result tend to be shorter, work as an improver to last longer. Wide skill of a moderate level comes once for all during the former, but perfection in a higher grade only after a slow ripening of the powers. A shorter period of service, therefore, does not necessarily involve a lessening of skill, when so much is still left to be acquired after its conclusion.

For all these reasons it is probable that the skill necessary, and the time taken to learn, have not decreased, though the period of service may have done so ; and in some cases the greater technical and scientific knowledge of to-day really involve a higher general capacity. Further, any decline in the level is likely to be not an absolute one, but due to changes in the relative numbers employed in the different grades. If it has taken place at all, it arises out of the fact that the semi-skilled processes employ a larger share than formerly of the working population, and that their increase has been more rapid in proportion than that of the higher ranks. Upon these points, however, and more particularly upon the latter, no confident answer can be given.

Within each class, on the other hand, the level has probably been raised. There may be fewer fitters in proportion than formerly and more machine-men, but both fitter and machine-man are better workmen than they used to be. Hence, even if this comparative increase in some of the lower ranks of labour is an actual fact, the general improvement in the skill of all grades has to be set against it, and the net result is improvement rather than diminution.

One reservation must be made, however. So far the question has been of what is required of a competent workman, and not of the skill actually possessed by the rank and file. For here it is probable that defective methods of training and other influences cause far too many to grow up insufficiently trained for their different tasks, and that the number of these is increasing. Their need of thorough training is greater than formerly, and probably what they actually get is inferior, and one of the most disastrous results of our existing lack of method is that it has failed to provide fully for the higher standard of to-day. In short, the skill needed is no less than it was, but the need is less well provided for.

(d) **Preference and Heredity.**—The questions of Preference and Heredity affect considerably not only the suitability of different boys for different jobs, but the whole problem of recruiting. They may be defined as follows :—*Preference*

means the taking by an employer of sons or relatives of his own workpeople rather than others, and *Heredity* the recruiting of trades from the sons or relatives of those engaged in them, which includes the further question of hereditary capacity to exercise them.

The former does not confer any right like that of *Paternity* or that given by some Trade Unions to their members to teach one or more of their sons without binding them. The individual firm does not admit the possession by its workmen of the right to put their boys into its vacancies. It retains for itself the power of deciding in each case, though sometimes a refusal is practically impossible. The Watermen, perhaps, provide the nearest approach to a right, and a few Trade Unions, I believe, try to reserve openings for sons of their members generally, but not necessarily of those employed in a particular shop. Otherwise employers retain their freedom of action, and many men prefer to place their boys elsewhere.

Such a right was far more common in the past when a man not only brought his sons into the workshop but taught them himself. Now, even when they are employed in the same firm, they seldom work together. When they do, the father is usually a small employer or a workman just setting up for himself, so that his position is rather different, since he is either training the lad in order that he may succeed him in the business, or else is giving him a start in this way, with a view to getting him into a bigger firm later on as an improver. Foremen again sometimes teach their own sons, but some of them choose to put them under another man. So too in *Following-Up* a lad will not seldom start as mate or assistant to his father, and where piece-work is common, as in the wholesale Cabinet Trade, men take their boys to help them, whilst among the Watermen a good many are apprenticed to their fathers. Otherwise father and son only work together in individual cases and comparatively few firms encourage such arrangements. Where a preference is given, however, it will often be made a condition that a man looks after his boy if necessary,

and sometimes they are put together till the latter gets used to the work.

Most employers give some sort of preference to their men's sons, and this will frequently be extended to include other relatives. Neither is it confined to mechanics, but embraces clerks, warehousemen, labourers and carmen; and thus they give men in the lower grades a better chance of getting their sons into skilled work. Carmen seem particularly successful in placing their boys in good trades, thanks partly to the large number of firms with whom their job brings them into contact, whilst men in the Building Trades, who move about a great deal, often provide for them either with old employers or with those engaged in different branches who are working on the same contract.

Some shops, moreover, give not only preference for vacancies, but more favourable terms of employment, as when their men are excused the payment of a premium or allowed to pay at a reduced rate. One big firm, indeed, demands a very heavy one from all others in order to discourage applications from outside. Or again, sons of their employés may be taken on without an indenture, or allowed, when others are not, to enter their service as improvers, or to come and go with their fathers.

The actual extent of such preference varies. A few employers try to fill all their vacancies from the families of their own men, some getting more than they want in this way and others failing to get sufficient. Much depends on the prospects of the trade in the near future, since a bad outlook deters a man from putting his sons into it. A more common practice is to inform them of vacancies and give them the option of filling them, whilst also receiving outside applications or promoting smart errand boys. Others, again, confine the preference to foremen and old and respected workmen, in whose case, indeed, it may not be easy to refuse it. Some also take such a lad if there happens to be an opportunity, but will not upset existing arrangements for his benefit. A few give no preference at all or even try to avoid taking their men's sons, either because they think

them likely to do better away from their fathers, or because of the difficulty of getting rid of them if they are unsatisfactory ; but such are not very numerous. Finally, a good many have no definite policy in the matter. The great majority, however, do give some sort of preference, if only to the extent of trying to oblige any well-conducted workman.

Frequently, indeed, none is asked for and employers not seldom say that " a case has never arisen " or that the grant of it is not taken advantage of. Many men prefer a different trade for their boys, others merely a different shop, and the reasons for this can best be discussed as part of the general question of heredity.

There is less of this latter in London than might be expected, and its importance there is reduced by certain special influences. The happy-go-lucky selection of occupations causes many to enter those to which they are not best suited, and any marked capacities in their sons is, therefore, as likely as not to be for something else. Others, again, have no special aptitude for one trade rather than another, and their boys will probably be much the same. Finally, its industries are so many and so scattered that interchange between them is far more likely to take place than in towns in which one or two are predominant.

As a result there is little doubt that in London children follow their parents less frequently than elsewhere. Employers and foremen, even where only a few apprentices are taken, often experience difficulty in getting sufficient from among the sons of their own men, whilst those who can get more of them than they want, usually employ very few. Moreover, where sons do largely follow their fathers, it will generally be found either that the trade is a specially prosperous one into which everybody is trying to enter, or that the firm has an exceptionally good reputation. It is true that heredity is somewhat more marked in the localized industries, such as the manufacture of leather. But even allowing for this and for those who go into different workshops in the same trade, or who enter closely allied ones,

the proportion of lads who follow their fathers is small.

As illustrating this the following table analyses the cases of some eighty-seven learners whom I was privileged to interview at various Trade Schools :—

|  |    |    |
|--|----|----|
| Father in the trade—                       |    |    |
| As Employer . . . . .                      | 8  |    |
| As Foreman . . . . .                       | 2  |    |
| As Journeyman . . . . .                    | 15 |    |
|  | —  | 25 |
| Other Relatives in the trade—              |    |    |
| As Employer . . . . .                      | 1  |    |
| As Journeyman or Apprentice . . . . .      | 7  |    |
|  | —  | 8  |
| In Cognate Trade to Father's . . . . .     |    | 10 |
| No connexion with Father's Trade . . . . . |    | 44 |
|  |    | —  |
|  |    | 87 |

No family connexion, therefore, could be found in just over half these cases, but in many of the remainder there is no certain proof of heredity. Those in which the father is a small employer or foreman are peculiar—first, because the opportunities for teaching are specially favourable, and, secondly, because, where the father has a business of his own, boys are put into it, who would not be if they were the sons of journeymen. Moreover, such boys are probably much over-represented at the schools, in proportion to the numbers who are so situated. Again, in the case of brothers, it will often happen that the elder one has succeeded in a different trade than that of his father ; nor does a closely allied employment mean much, since many will put a lad into any job, provided it is not their own. Hence the true proportion of hereditary cases is likely to be very much less than that shown in the table.

If, however, statistical measurement is difficult, there is more ample general evidence as to the facts. This preference for other trades is due to a number of causes apart from those already mentioned. The matter varies with the state of trade. The Boilermakers' Union tries to reserve as many vacancies as possible for sons of its members, and in the

Engineering Trades generally men try to secure them, but have to face very keen competition from outsiders. In Printing heredity seems to be marked with the machine-managers, with the young and growing branch of stereotypers, and, to a smaller extent, in lithography. It is much less so with compositors, whose trade has tended to become over-stocked. Comparatively few boys, on the other hand, follow their fathers into the Building Trades, except with plasterers, masons and possibly plumbers, or into the woodworking group. The Art Metal Trades occupy an intermediate position.

Secondly, men are being increasingly influenced by any special disadvantages attaching to particular callings as they come to realize these more clearly. Thus the fear of the displacement of hand labour by machinery has largely influenced woodworkers, and even during the Building boom previous to 1900 restricted, though it did not altogether prevent, the increase in the number who took up joinery. So, again, trades are being avoided in which, as in painting or bricklaying, there is much seasonal or general irregularity of employment or where, as with silversmiths, the former is becoming more marked.

Thirdly, a great many appear to have a prejudice against their own trade and to prefer anything but that, especially if they themselves have not been very successful at it. They realize its disadvantages, but not those of other jobs, and therefore try at all cost to place their boys elsewhere, whilst sons of mechanics in poor circumstances may have to take up highly paid labouring work. On the other hand, those who have done well may make their boys follow in their footsteps, but many successful artisans, though not perhaps so many as formerly, hope to raise them still higher by putting them into clerical employment. Moreover, apart from the necessary interchange between different industries, the number and scattered character of those of London always give a man plenty to choose from besides his own, and this has a similar effect. A boy is far more likely to go to a trade that is not his father's than in places

where a few industries employ the bulk of the population.

Finally, several reasons are leading the workmen to choose different shops in their own trade. Sometimes they think that others can give a wider and more varied experience than their own; and even more frequently they feel that they are better apart, that the boy ought to fight his own battles, and that he will do more for himself under a stranger. Such reasoning is common and implies on the father's part neither dislike nor distrust of his own firm.

(e) **Wages.**—The question of learners' wages, especially at the start, is an important one, more particularly in their relation to those of unskilled boy labour, as a result of the superior attraction given, or said to be given, by the higher earnings of the latter. The difference between the two, however, at any rate in London, is not nearly so great, nor are the initial wages of the former so low, as is very generally supposed. The great variety of methods considerably complicates matters. Some boys do not go to their trade as soon as they start work, but later, when their greater age and strength often help them to command better money. Others start to work at their trade before they start to learn it and their wages, even if they are apprenticed, will usually, though not always, be fixed by what they were before and not by the ordinary apprentices' rate. Others again, as in silversmithing and trunk-making, will combine the two, spending part of their time at the errands and the rest at the bench. Thus apart from the helper or assistant in following-up, boys start to learn in three ways: as definite apprentices or learners, at boys' jobs learning in their spare time, and at pure boys' work that leads later on to learning. The two latter methods are growing. The definite learner, therefore, comes into competition with them, and this competition has tended to raise his wages nearer to theirs, especially where he has already worked in the shop in some other capacity. In some cases, however (especially in those of boys brought into the firm from outside), they may at sixteen still have to accept the wage of an ordinary apprentice in his first year. Finally the increase in the wage-contract has

forced up the rates paid to learners, though these remain lower than those of boy labourers.

Methods of Wage Payment fall into three main classes—Fixed Time Wages, Time Wages varying with the value of the work, and Piece Wages. In the first case, but not in the other two, there is usually an accepted scale for all boys, rising each year by a definite amount. It is generally a weekly wage, it is sometimes supplemented by certain additional payments, and is often payable during holidays and sickness, at least when these are of short duration. Hourly wages are usually higher, but to prevent slackness are only paid for the time actually worked.

Fixed Time Wages take various forms. First, there is the uniform rate, most common with bound Apprentices and the more formally engaged learners. With this there is an agreed rate of increase each year. Sometimes this is 2s. or 2s. 6d. a year throughout, but at others it may begin with only 1s. a year and rise later by 2s. 6d., 3s. or 4s., and occasionally in the last year of a long apprenticeship by as much as 6s. or 7s. Variations according to character and progress are not recognized, and some firms adhere strictly to these rates, finding that to discriminate causes jealousy. Others, however, will in practice give an additional rise to satisfactory boys. Again, with some learners employed "during good behaviour," there is often an informal understanding, as in silversmithing, that a boy shall receive a uniform rate and a fixed annual rise as long as he stays; 5s. a week to start, with 2s. 6d. a year or 1s. every six months, is most usual. As the boy is not bound, however, alterations are easier than with apprentices. The employer may have to concede an additional rise to keep him, or may be able to refuse or delay the ordinary one if he does not give satisfaction.

A fixed wage, however, will often be supplemented in various ways. Sometimes a definite additional weekly payment may be made, either at once or after the first year or two, in return for good conduct and progress. This may take the form either of an increase of the weekly wage or a

bonus or other payment in proportion to the output. The latter usually depends on how much a boy can turn out above a certain minimum amount, and, like piece-work payments, is apt to tempt him to keep to forms of work at which he can earn a high bonus instead of acquiring an alround knowledge of the business.

The other method of supplementing wages is more satisfactory and finds its best illustration in the Good Conduct Money paid in the Printing Trades, which is, or can be, withheld if satisfaction is not given. Usually it consists of an additional 2s. a week on the wages specified in the indenture, the two together often amounting to 8s. in the first year. Sometimes, however, it is only 1s. a week at the start or is not paid at all till the second year. In one case the payment consisted of wage and conduct money in equal amounts, the two combined being 6s. in the first and 8s. in the second. The method is, as a rule, very successful, so much so that the payment is seldom withheld, and it is perhaps the best way of keeping an apprentice up to the mark.

Lastly, whilst a wage is fixed for each year of service, additional money is, or may be, given, if the boy is worth it. I came across one indenture, for instance, where the apprentice "may be paid something over and above his agreed wages, but this shall not be paid as of right." More often there is a verbal promise to this effect, or the boy is led to understand that his chance of such a thing depends on himself. Frequently, however, a firm simply gives the additional rise when it thinks fit, or the boy asks for one and gets it, especially if he can go elsewhere if it is refused. The result, therefore, is a fixed minimum wage supplemented by additional payments according to circumstances.

The second class of wage payment consists of a Time Rate varying from one boy to another according to the value of their work. In this case, when a lad is put to the bench, the foreman decides what he is worth, and pays him accordingly. After this his money rises according to his ability, and not to any fixed scale. Thus two boys may start at the same age, the same time, and the same rate, and yet after

a few years be earning very different amounts. This is common in the Building Trades where youths of twenty often get high wages. It is thus a payment fixed in advance, according to an estimate of the work likely to be done, some allowance for the trouble and loss involved in teaching being usually made. This method is common with Migration and the less formal kinds of Regular Service and, where there is no agreement, with Following-Up. Payment by the hour is usual, with no allowance for loss of time, and the boy is paid not only for the value of his work but for the actual duration of it and no longer.<sup>1</sup> Sometimes these two methods are combined, and a fixed weekly wage is paid for the first few years and later an hourly one, rising according to "what he is worth."

Payment of learners by the piece is not common, even when it is usual with the journeymen, and where it is found it sometimes takes a special form. Thus in Engineering a boy may be set to assist a gang or squad on piece, who will pay him a time wage and make what they can out of him. Improvers, on the other hand, will more usually follow the custom of the shop in which they are employed. In a few cases, however, apprentices and learners are paid in this way, though to begin with they often get a time wage until they know something about the work. Then they get a fraction of the men's rate. To illustrate this method of payment the cases of the Fleshers, Brushmakers and Tinplate Workers may be described.

With the former learners are apprenticed to the men's Union at the age of eighteen for a period of four years and are put in charge of a particular man. The recognized rate of pay is so much per 100 skins (4s. 6d., for instance, for sheep-skins), and the apprentices get a lower one. The difference between the two is divided equally between the man and the firm, to compensate for trouble and spoilt material respectively.

In the Pan and Hair work in Brushmaking, the boy works

<sup>1</sup> With the possible exception of public holidays.

for three or less frequently six months at one branch with a journeyman, who teaches him and gets the benefit of his earnings. Often, though not always, he receives no wages during this period, or only what the man chooses to allow him. After this he is put on half piece-rates, which later on are sometimes raised to two-thirds. Then when he has served half his time, the same process is repeated with the other branch of the business. In Paint Brush work, where seven years, and not five, are the rule, the rates paid are usually higher.

Finally in Tinsplate Working the practice varies, as some firms pay time wages throughout. In the majority, indeed, these only last for about two years, till the boy knows enough to go on piece work. The rates paid vary from one-third to half of the ordinary ones to begin with, and later on from half to two-thirds. Outside these trades, however, payment of learners in this way is not often found except in individual firms, but it is far more common with improvers.

In London boys' wages, both with learners and labourers, are well above the average and, as already stated, the difference between those of the two classes is less than might be supposed. On this matter the working of the London Labour Exchanges has brought to light some interesting facts. One sub-manager declared that the wages offered, where there was opportunity to learn, were a revelation to him. He put the usual rates at from 5s. to 7s. to begin with for the former and from 6s. to 8s. for the latter. The comparison is somewhat affected by the high wages paid to apprentices in some big firms, but on the average the difference is probably not more than 2s. a week. Similarly the Skilled Employment Associations have found that a learner, especially if prepared to make himself generally useful, should be able to secure a starting wage of 5s., and with some exceptions my own experience confirms this. Less may have to be accepted, however, by some bound apprentices, by those employed in some small struggling firms which only offer 4s., and by some of those engaged upon high-class work, or where expensive materials are used. On the other hand, some boy labourers,

especially errand boys in small shops, get no more than 5s. a week.

The approximation of the learner's wage to that of the errand boy in a small shop is the result of several causes. First, the shop boy working his way up to the bench or spending part of his time at it, is growing more and more common; and, secondly, employers of other learners are coming to use them in this way for the first two years and so have raised their wages accordingly. Hence the existence of this alternative way of acquiring the trade, and the increasing amount of labouring work that they do, have improved their pecuniary position, whilst causing them often to take longer to get full money. Thirdly, the wage-contract has extended itself to the apprentice and learner, not quite to the same extent as with Migration, but still to a considerable degree. Thus their earnings in their earlier years now approximate far more nearly to their value as workers, and as a consequence, the employer does not undertake to do as much as before in the way of teaching them. When, further, the conditions do not allow, as often they do not, of a full knowledge being acquired in a single firm, there is much to be said for such an arrangement. The result of these various causes, therefore, is that where the errand-boy with a chance to learn gets from 5s. to 7s., the learner as a rule gets at least 5s., so that in most London trades initial wages at fourteen are not as a rule below this, 4s. being uncommon and 3s. rare. The chief exceptions have already been described, and at the start wages are sometimes lower when apprenticeship lasts for four years only. In some cases, moreover, the yearly increase may be bigger later on, to compensate for the lower initial rate, but, on the other hand, those who start fresh at fifteen or sixteen may have to be content with 5s.

Five shillings a week, therefore, often constitutes a tacitly recognized minimum wage for learners, and this fact goes far to justify the parents' insistence upon it. Moreover its frequency shows that there is little ground for the fear, which is sometimes expressed, that the learning of

a trade will involve nominal or very low initial wages. Even where the material is valuable, the necessity for these can be avoided, either, as in high-class bookbinding, by a seven years' apprenticeship, or, as with certain saddlery firms, by only raising the rate by 1s. a year instead of by two or more. With the latter a lad starts usually at 6s.

Among the chief branches of skilled employment Printing pays, on the whole, the best wages, and these are often as good as those paid to ordinary boy labourers of corresponding ages. The prevalence of seven years' service gives the employer a longer time to recoup himself for any initial losses, and the greater demand for them shows the employment of apprentices to be more profitable than elsewhere. Except in small offices, the wage is seldom below 6s. in the first year and is frequently 7s. or even 8s. The latter appears at one time to have been the minimum in the large society offices, but the former is now more common. In the last year the wage is usually about £1, but is sometimes more. Moreover, the actual wage is frequently increased by Good Conduct Money, usually of about 2s. a week, and sometimes by a bonus. 5s. to start with is usual in Engineering, but sometimes as much as 8s. is paid; but here many boys do not commence work till fifteen or sixteen. 5s. or 6s. again is normal in Building and Woodworking with occasional higher rates. In Woodcarving, for instance, 8s. is common, but the apprentices have as a result to do much labouring work for the first two years or so. In Silver-smithing and Art Metal, where there are many small shops, and in the making of leather goods, the learner usually begins as an errand-boy at 5s. or sometimes in the latter at 6s.

Interesting information as to the wages of boys are given in the recent series of Board of Trade reports on earnings and Hours of Labour in various trades in 1906 or 1907. The exact figures required for the purpose of estimating the initial wages are not available, but a sufficient approximation to them can be obtained. The number of lads and boys of all kinds employed at different rates are given for the

United Kingdom only, but the average earnings, both of apprentices and of other boys, in London and other important districts, are stated separately. Moreover the Reports give, in almost every case for apprentices and in some instances for other lads, the median and the upper and lower quartile,<sup>1</sup> and this further assists us to calculate the proportion earning the lower rates in London. Further they provide separate returns for those who worked full time and for all boys, including those who worked more or less than this, and also distinguish time and piece workers. The figures given below refer only to time-workers who worked full time. Of these, taking the country as a whole, the percentages in different wage groups below 6s. per week were as follows.

|  | Under<br>3s. | 3s. and<br>under<br>4s. | 4s. and<br>under<br>5s. | 5s. and<br>under<br>6s. |
|--|--------------|-------------------------|-------------------------|-------------------------|
| Building Trades—All towns . . . . .              | 1·4          | 3·3                     | 7·1                     | 11·8                    |
| Towns of more than 100,000 inhabitants . . . . . | 0·6          | 2·2                     | 6·1                     | 11·3                    |
| Sawmilling . . . . .                             | 0·3          | 0·8                     | 2·9                     | 8·3                     |
| Cabinet-making and Machined Wood-work . . . . .  | 1·8          | 4·4                     | 9·4                     | 12·8                    |
| Engineering and Boilermaking . . . . .           | 0·3          | 1·4                     | 6·9                     | 11·8                    |
| Shipbuilding and Repairing . . . . .             | 0·1          | 0·4                     | 2·5                     | 3·7                     |
| Miscellaneous Metal . . . . .                    | 2·2          | 0·7                     | 3·6                     | 9·3                     |
| Railway Service . . . . .                        | 0·3          | 0·0                     | 0·5                     | 3·7                     |
| Printing . . . . .                               | 0·8          | 2·5                     | 7·6                     | 13·9                    |
| Bookbinding . . . . .                            | —            | 1·7                     | 9·4                     | 15·0                    |
| Paper Stationery . . . . .                       | 0·2          | 1·1                     | 6·5                     | 18·0                    |
| Tailoring (Bespoke) . . . . .                    | 7·7          | 10·1                    | 10·1                    | 18·5                    |
| Tailoring (Ready-made) . . . . .                 | 0·6          | 1·7                     | 6·1                     | 10·9                    |
| Boots and Shoes . . . . .                        | 0·1          | 0·5                     | 4·6                     | 10·9                    |

<sup>1</sup> Professor Bowley defines these as follows: "When we are dealing with a group of persons or things, each of which possesses some measurable quantity, such as height or wage, we can choose certain quantities which describe the group in brief. Suppose all the items are arranged in a series in ascending order of the magnitude of this attribute, the magnitude appertaining to the item half-way up this series is called the median. The magnitudes one-quarter and three-quarters up the series are called the quartiles,

Thus, taking the whole Kingdom, very few boys earn less than 3s. a week for full time, and the number earning between 3s. and 4s. is only considerable in Bespoke Tailoring and Cabinet Making. In eight groups out of twelve it is less than two per cent., and in only two cases does it exceed four. Even between 4s. and 5s. it is less than 5 per cent. in five cases and in four more, it ranges from 6 to just over 7 per cent., these latter including Engineering, where the age of entry is usually rather later than in other industries, and Building. Now, except in the smaller towns and a few large ones where wages are low,<sup>1</sup> these rates are likely to be those of boys in their first year. Hence for all towns a boy's initial wage will range from 4s. to 6s., from 4s. 6d. to 5s. being perhaps most common. On the other hand, these returns include improvers and boy labourers, and so the proportion of apprentices and learners who earn the lower rates will probably be somewhat greater, whilst the firms which make them will, on the whole, be paying rates somewhat above the average.

On the other hand, London wages for boys are as a rule higher and often much higher than elsewhere, as is shown by the following table :—

|                       | Average Wages. |                | Lower London. | Quar- tile. All Dis- tricts. |
|-----------------------|----------------|----------------|---------------|------------------------------|
|                       | London.        | All Districts. |               |                              |
|                       | s. d.          | s. d.          | s. d.         | s. d.                        |
| Building Trades—      |                |                |               |                              |
| Improvers . . . . .   | 24 9           | 19 6           | 18 6          | 14 6                         |
| Apprentices . . . . . | 11 8           | 8 2            | 7 0           | 5 0                          |
| Other Boys . . . . .  | 12 6           | 9 9            | —             | —                            |

lower and upper respectively." Thus in the case of the 10,350 apprentices in the Building firms about whom information was given for the purposes of the Board of Trade Report, the wage of the 5,175th apprentice measuring upwards represented the median, and the lower and upper quartiles lay between those of the 2,577th and 2,578th and the 7,752nd and 7,753rd respectively.

<sup>1</sup> This is illustrated by the decrease in the percentages earning the lower rates in some of the larger towns.

|  | Average Wages. |                   | Lower<br>London | Quar-<br>tile.<br>All Dis-<br>tricts. |
|--|----------------|-------------------|-----------------|---------------------------------------|
|  | London.        | All<br>Districts. |                 |                                       |
|  | s. d.          | s. d.             | s. d.           | s. d.                                 |
| Sawmilling—                                      |                |                   |                 |                                       |
| Apprentices . . . . .                            | 9 9            | 9 1               | 6 6             | 6 0                                   |
| Other Boys . . . . .                             | 10 8           | 9 8               | 7 6             | 7 0                                   |
| Cabinet Making and Allied<br>Trades—             |                |                   |                 |                                       |
| Apprentices . . . . .                            | 10 10          | 7 6               | 7 0             | 5 0                                   |
| Other Boys . . . . .                             | 11 9           | 10 2              | 8 0             | 6 0                                   |
| Engineering and Boilermaking—                    |                |                   |                 |                                       |
| Apprentices . . . . .                            | 11 5           | 8 0               | 7 0             | 5 0                                   |
| Other Boys . . . . .                             | 12 11          | 11 10             | —               | —                                     |
| Railway Locomotive, Carriage<br>and Wagon Shops— |                |                   |                 |                                       |
| Apprentices . . . . .                            | 10 1           | 9 3               | 7 6             | 6 0                                   |
| Printing—  |                |                   |                 |                                       |
| Apprentices . . . . .                            | 12 6           | 8 10              | 8 6             | 6 0                                   |
| Other Boys . . . . .                             | 10 2           | 8 3               | 7 0             | 5 6                                   |
| Bookbinding—                                     |                |                   |                 |                                       |
| Apprentices . . . . .                            | 12 2           | 8 11              | 8 0             | 6 0                                   |
| Other Boys . . . . .                             | 9 11           | 8 1               | 7 0             | 5 0                                   |
| Paper Stationery—                                |                |                   |                 |                                       |
| Apprentices . . . . .                            | 11 2           | 8 11              | 8 6             | 6 0                                   |
| Other Boys . . . . .                             | 10 2           | 8 2               | 7 6             | 5 6                                   |
| Tailoring (Bespoke)—                             |                |                   |                 |                                       |
| Apprentices . . . . .                            | 8 9            | 6 3               | 5 0             | 4 0                                   |
| Other Boys . . . . .                             | 10 8           | 8 7               | —               | —                                     |
| Tailoring (Ready-made)—                          |                |                   |                 |                                       |
| Apprentices . . . . .                            | } 11 7 {       | 9 5               | } 8 0 {         | 6 0                                   |
| Other Boys . . . . .                             |                | 9 9               |                 | 6 0                                   |
| Boots and Shoes—                                 |                |                   |                 |                                       |
| Apprentices . . . . .                            | 15 0           | 9 4               | —               | 6 0                                   |
| Other Boys . . . . .                             | 10 2           | 10 4              | 8 0             | 6 0                                   |

Thus the trades represented cover a very considerable part of London industry, and over so wide an area it is remarkable how very little difference there is between the wages of apprentices and other boys. In the majority of cases, the latter exceed the former by about 1s. or 1s. 6d. per week, whilst in Printing, Bookbinding and Bootmaking apprentices get appreciably more than others. Moreover, in London at any rate, this difference is caused little, if at

all, by higher earnings on the part of the older apprentices, for the lower quartiles, when available, show much the same differences as do the average rates, the only important exceptions to this being found in the case of Printing and Bookbinding. It should be remembered, however, that the phrase "other boys" includes many learners of various kinds, and differences in wages would probably be greater if the comparison were made, not, as here, between apprentices and other boys, but between learners in these industries and boy labourers of all kinds, including shop, errand and messenger boys, and those in unskilled factory employment.

Sawmilling is the only trade in which apprentices do not earn considerably more in London than elsewhere, the average being only 9s. 9d. as against 9s. 1d. and the lower quartile 6s. 6d. as against 6s. Otherwise the difference in the average varies from 2s. up to 3s. 8d. except in the Boot Trade, where it is even larger, and the lower quartile is usually about 2s. higher. In Building, Cabinet Making and Engineering it is 7s., and in the Printing Group 8s. or more; and it is worth noting that Cabinet Making has a large number earning less than 5s. in the United Kingdom as a whole, but that in London its lower quartile is the same, 7s., as in Building and Engineering and its average rate very little smaller. In one case, however, Bespoke Tailoring, the lower quartile is as low as 5s. so that a good proportion of the boys must be getting less. This is probably due to the high quality of much of it and to the value of its material, which involves payment of lower wages to apprentices.

Hence it seems certain that with this exception few learners in these trades have to start at less than 5s. a week in London, whilst other evidence suggests the existence of a large group there which commences at that rate. Unfortunately the Reports give no direct information on this point. Moreover, the small proportion of bound apprentices further reduces the number of those who are likely to earn less, and increases that of those who get a higher initial wage. The available evidence, therefore, supports

the contention that 5s. is the normal payment for a learner in his first year, and that anything below this is uncommon.

The next point to be considered is the rate at which wages rise. This will, as a rule, be a fixed one only where there is some sort of agreement or understanding. Increments of 2s. are perhaps most common with sometimes a rather bigger increase later on ; but with the less formal conditions 2s. 6*d.* a year is not unusual. Sometimes, however, they only rise at first by 1s. annually, especially where the trade is an expensive one to teach, and this has to be met by a slower increase. On the other hand, lower initial wages may be compensated for by a more than usually rapid one. Bigger increments, moreover, are frequently given in the later years of service, and a rise of 5s. or more in the last is sometimes found. But the frequency with which boys are paid according to their value or are given an additional increase above the agreed rate, if they are worth it, makes it impossible to say definitely what their standard will be. Those who are so situated usually get better wages than others do, but have less certainty of regular employment.

In the last year of service, therefore, the wage varies enormously, both on this account and because of differences in its length. Usually the teaching of an apprentice involves some loss in the earlier part of his time, for which the employer looks to recoup himself later on. He cannot, as a result, afford to pay so much, when it only lasts four or five years as when it continues for six or seven. This is one reason for the comparatively high rates prevalent in the Printing Trades, which in the last year are seldom below 21s. and are sometimes as much as 25s. In the Building Trades 18s. to £1 are more usual with six or seven years, and in Engineering, Silversmithing and the Furniture Trades about 15s. in the last of five, though more is sometimes given. The normal rates, therefore, would probably be 20s. or 21s. with seven years, 18s. with six and 14s. or 15s. with five. But learners of from nineteen to twenty-one who are "paid what they are worth" often get very much higher money, particularly in the Building Trades.

Compared with past years, the wages of learners have undoubtedly increased, and not only are they higher to start with, but they progress more rapidly from year to year. Moreover, with some few exceptions, this improvement has been general and continuous for some time. Thus a South London Labour Exchange Official, with thirty years' experience of Engineering, put the wages in it at 8s. to commence, and 2s. or 2s. 6*d.* a year rise, instead of 5s. and 1s. a year when he served his own time; and whilst the initial wage is not generally so high as this, the rate of progression certainly is, and both have without doubt improved considerably.

Many of the fears entertained by parents are, therefore, more or less baseless, and there is not as a rule any necessity to accept less than 5s. in order to secure a chance to learn, though from lack of information less will sometimes be taken. Many boys, however, get this rate without assistance, and the development of Juvenile Labour Exchanges will enormously improve their power of bargaining. Again the difference at the start between learners' and boy labourers' wages is often small, notably in Building, Cabinet Making and probably Engineering; and even allowing for the various boys' jobs not attached to any particular trade, for vanguards and for unskilled factory labour, it is still not very great and taking a general average is probably covered by from 2s. to 3s. a week. The learner can usually, therefore, obtain 5s. or 6s. as against the 7s. or 8s. of the boy labourer, and if they can get the former, many are ready to give up the latter in return for an opportunity to learn something.

The present trouble, therefore, is due less to the actual wages that accompany a chance to learn than to lack of information as to what they are. Hence it is necessary not only to bring home to parents that present high wages may mean future low earnings, but still more to dispel the idea that the learning of a trade necessarily involves very low wages at first, or even no wages at all, when in fact a reasonable amount can be obtained. Often they reject the

idea of skilled work because they think less will be offered than they can afford, when this is not the case. Secondly, the available jobs must be put within as easy reach as possible of the boys who need them. Thirdly, provision must be made for those abler children whose circumstances compel them to obtain good money at once ; and certain jobs do give this and at the same time offer means of advancement to a smart lad. Finally it will probably be desirable to reorganize methods of payment, either to give rather more at first in return for a slower rate of increase, or conversely to encourage parents by offering a higher wage than at present in the last few years. Like many other things, therefore, boys' wages require to be organized and regularized so as to meet existing needs, and to assist their proper placing and training.

## CHAPTER XI.

### AT WORK IN THE SHOP.

Importance of way in which teaching is given in detail—Employers undertake less than formerly—Causes of This—The Promise to Teach means less—Opportunity to Learn—Contract may only cover part of a trade—Influence of rise in rates of wages.

Responsibility for seeing a boy is taught rests mainly on Foreman—Large and small shops compared—In some cases, however, it must rest with the men—Foreman may delegate actual instruction—Question of time he can give to it—He gives general supervision, help and advice.

Different Arrangements—Boy definitely in charge of a man : Joinery ; Following-up—For how long ?—Among the men generally—Special Arrangements—The Apprentices' Room with a man paid to teach them—Its Advantages and Disadvantages—Amount of teaching varies as a result of various causes—Teaching and Instinctive Acquisition of Knowledge—Importance of Boy's own Behaviour.

Mode of Acquiring a Trade—General Course varies Little—Boy made generally useful at first—Strong Arguments to support this, if it is not too long—Progress after this—Trades in which there is a regular Progression in the work—Trades where there is not—Illustrations : Upholstery ; Joinery ; Compositing—Course much the same in absence of Agreement, but takes longer—Learning falls generally into two parts : to do the work, to do it expeditiously.

Payment of Foremen or Men for teaching not common—Men's attitude usually favourable—Exceptions to this and Reasons for them—The Foremen's Position—Usually do their work excellently.

Defects of Existing Methods—Failure to give actual teaching, but boy pushed on as rapidly as he can learn—Failure to teach more than a part of the trade—In the worst cases means serious exploitation—Less serious form of it—Defective teaching mainly due to circumstances—Deliberate Exploitation not common—Existing abuses consist chiefly of some form of over-specialization—Its Advantages and Disadvantages to Employers—Not much to be gained by it under existing conditions in London.

London demand is for " men, not boys "—Provincial supply

of Labour strengthens this—Higher cost to employer of learners than formerly—They are not profitable except in a few trades—Difficulties rather that boys are not taken than that they are not taught.

In a preliminary chapter, I pointed out that two problems have to be distinguished, namely : how a boy learns a trade, and how he is actually taught it. The first of these has already been dealt with, and we have now reached the question of how knowledge of a trade is imparted in detail and of how a contract to do so is carried out in practice. This second problem is of little less importance than the first. Well conceived arrangements may go astray or, on the contrary, when a boy is left to pick up his trade as best he can, his employer may take so great an interest in him that he succeeds excellently. Very much, as a result, depends upon individuals, but still, after all allowances are made, the value of the teaching will, on the whole, vary with the excellence of the arrangements under which it is imparted. In other words, the general conception will affect the details.

It is necessary, therefore, to ask, first of all, what it is that the employer undertakes to do, and what are the considerations in return for which he does it. Generally speaking, boys are taken under circumstances that neither bind, nor enable, him to give the same attention to them as in the past. Premiums are rare ; wages are from the very beginning much higher than formerly ; and the period of service is shorter. Thus the employer gets far less in return for teaching a boy, and the latter gets nearly his full value as a wage-earner, even in the case of Apprenticeships and other definite agreements. The effect of this upon his earnings has already been considered. Its effect upon training is that he has to do more for himself, and that his master has neither the means nor the obligation to give him as much as before. Self-interest, indeed, may lead him to take trouble over a smart boy in order to make a good profit from his last few years, but with Informal Regular Service this is checked by the fact that the lad

may, and sometimes does, take himself elsewhere just as he is getting valuable.

Normally, therefore, a boy can only claim "opportunity to learn" for himself and not definite training, and is himself responsible far more than he used to be for making his own way. If, however, this is the case where there is some form of contract or agreement to teach, it is still more true of other methods of employment, where the learner is simply paid for what he does and teaches himself as best he can, as with Migration, with Working and Learning under Regular Service, and sometimes with Following-Up. Modern conditions of teaching, in short, do not impose upon the employers the same obligations as in the past, and as a result they leave far more to the boy, though many of the former give much time and trouble to the matter, even when they are not really bound to do so.

To some extent the displacement of Apprenticeships by less formal agreements and understandings marks this change; but it is due only in part to this, and is largely influenced by other modern developments, such as machine-production and subdivision. Whatever the cause, the result is that a promise to teach means not only something different, but something less than it used to do. First, it is becoming much more than formerly a contract to pay wages, and even with formal agreements what is paid is often such as to preclude the devotion of the same time and attention to the matter.

Secondly, what the employer undertakes is rather to give the boy opportunity to learn for himself than actually to teach him. The boy comes into the shop under certain conditions, is put among the men and given work to do, and, by seeing the men at work and getting help first from one and then from another, is able in time to secure promotion and gradually make his way. Not seldom there is not, and cannot be, the same systematic teaching as was once given, at least in many big shops. This is not entirely a question of wages, but in part of organization and methods of production; and the latter often make it difficult to teach the whole of a

trade in a single firm. The result was summed up as follows by a large firm of Builders : " We are prepared to take a boy and do what we can to teach him, but we always refuse, owing to the changed conditions of the present day, to take a man's money to do so."

Thirdly, the contract to teach may not cover the whole of a trade, but only such parts of it as are carried out by the firm. In joinery, much of what is joiners' work in small shops is done in the machine room of the larger ones and cannot therefore be taught to the apprentices. In cabinet-making and silversmithing, only certain articles may be made, and so a boy can only be given such as the firm gets.

Again, as in Publishers' Bookbinding, a large business may subdivide its work among a number of comparatively simple processes, and in no one of them can much be taught because in none is there much to teach. The employer, therefore, only undertakes to teach such parts of the trade as he is engaged on. The case of Publishers' Bookbinding, indeed, is an extreme one in which the time for Indentured Apprenticeships has probably passed. But frequently the teaching is inevitably limited in one direction or another, though not to the same extent ; and this limitation has to be met by a reduced period of service, by Migration or by improved instruction in Trade Schools.

Finally, general conditions, and not least the scale of wages paid, render it necessary to use boys for the first year or two as boy labourers. Certain rates can only be earned by doing, for part of the time at any rate, other work than that of a learner, since otherwise a firm could not afford to pay them. Sometimes there is even a tacit understanding that this should be done, and less frequently it is a definite condition of employment. Boys have to earn their wages, and sometimes can only do so in this way, and where they are free to leave at any time the need for this will be particularly marked ; for as was pointed out by a prominent member of the staff of a certain Technical Institute :

"The employer (in such cases) cannot afford to look ahead with the learner, because he has to look to the immediate return of each week's wages. If he loses by pushing the boy on, and on the first year or two there often is some loss, he cannot feel sure that the boy, having been made worth more than he is actually paid, will not move elsewhere in order to get his full value."

Thus in various ways the actual agreement, or the conditions of employment where there is no agreement, commit the employer to less than formerly. And, on the other hand, a boy under modern conditions is frequently in a position to teach himself more than in the past. There is sometimes, for instance, less actual learning and more practising of what has been learnt, and the Trade Schools are taking an increasing part in the matter. Whatever the cause, therefore, the fact remains that to-day a boy is paid more money and receives less attention.

Coming next to actual details, the responsibility for teaching rests in general on the employer, and in particular upon the foreman, in whose charge the learner is put. Only a general supervision is possible for the head of a big firm or for the General Manager of a large Limited Company, engrossed, as they must be, mainly in the commercial side of the business. Often, therefore, the foreman has practically a free hand, whilst the engagement and dismissal of workmen is frequently left to his discretion. Sometimes the existence of a Works Manager acts as a check upon him, but in many cases his power is only limited by an appeal to the employer in case of ill-treatment. With unbound learners and improvers, moreover, he may be even more absolute, and not only their teaching but their employment and wages will be left to him. He will exercise his discretion in raising shop boys to the bench, or in engaging improvers, according to the needs of the work, and will pay them "what they are worth." Occasionally "the office" arranges for and controls the apprentices, but leaves the others to him.

In firms of moderate size, however, the partners can

usually exercise a much stricter supervision. The actual teaching is still left to the foreman or the men, but, as one employer said, "we are always in and out of the place and can see what is going on," or, in the words of another, "we are our own Works' Managers, and though we do not actually teach we are always looking after the teaching." In small shops, again, it is often done by the "guv'nor," or "one of the guv'nors," thus bringing employer and learner into close personal contact. When the former is out, the lad will be put in charge of a leading hand, and may be so entirely if he has to be away a great deal. Where there are "two guv'nors," however, one will usually look after the commercial side of the business and the other the workshop, with full charge of the boys. But even with only one employer, he will at least take the place of a foreman in a big shop, leaving the men to fill in the details.

In some trades, indeed, especially under the method of Following-up, the chief responsibility must rest upon the men. Here a boy is far more under their control than under that of the foreman, and cannot be moved about from one to another like the ordinary apprentice. This is particularly true of Plumbers, for usually they are scattered in pairs all over a building or even over a number of buildings. But trades where these conditions prevail are not numerous, and normally the responsibility is undertaken by the foreman in a large, and the employer in a small, firm.

The detailed teaching, however, may not be, and frequently is not, done by the foreman, and with a large number of apprentices in a shop this would be impossible. But the boy is put in his charge, and he makes all the necessary arrangements for having him taught. He chooses the man with whom each is to work and sees that he does his duty by him, or, if a lad simply works among the men, that he gets fair treatment from them. He probably shows him how to do the first piece of work, continues to help him with advice when in difficulties, is at hand to see he does not acquire wrong methods of working, and at the right time he puts him to new and better jobs or to do one by himself.

He may even be given the discretion as to whether to pay him an extra rise in wages. That is to say, as part of his normal duties, he exercises general control and has to see that a boy is taught, whether by himself or by others.

It is sometimes said, indeed, that foremen have no time to teach the apprentices, who are thus left to get along as best they can. The detailed teaching has certainly to be imparted by individual men. But experience shows that as a body the foremen can and do exercise an effective control, though some individuals among them may fail to do so. Much of the teaching of general principles belongs rather to the sphere of the Trade School, but they contrive nevertheless to give the boys every chance of becoming good tradesmen.

Still the work of a foreman is limited to supervision of this kind and, apart from special circumstances, teaching is carried out in detail partly by the men and partly by the boy himself, the actual arrangements varying from trade to trade.

Sometimes a boy is put definitely in charge of a single man. In joinery, for instance, "put him with a man" is the almost invariable answer to a question on this point; for in this trade men normally work in pairs at a bench and the boy replaces the second man. The foreman distributes the work to the joiner, who gives the boy such of it as he is able to do and gradually brings him along, and exercises his discretion as to moving him about from one to another. If, however, the lad can get sufficient variety of work, he will probably stay continuously with the same man, at any rate for some time. Considerable responsibility, indeed, still rests upon the foreman. He has to see, for instance, that the man does his duty by the boy, and that he does not keep him back for fear he shall spoil the work. This method also obtains where Following-up prevails, and in a few cases, like the Fleshing of Hides, and Gold and Silver Wire Drawing, the learner is still bound direct to the journeyman. In other trades again, he may be in charge of two or more. Thus in solid plastering two plasterers may have a boy to help them and to learn the trade from them, whilst

in engineering an apprentice may be set to work with a squad.

Few boys, however, stay with a man throughout their whole period of service. Sometimes they may do so for a considerable time, but at others only for a few months, or at most a year or two, and as soon as they have mastered the elements of a trade, they start to work by themselves.

This is not unusual even with time wages, and is common where payment is by the piece. In the latter case they go for a few months to be taught by a man, who makes what he can out of them, and after this are put on piece-work at a fraction of the ordinary rate.

Finally, many simply work among the men and get what help they can. Usually they have a man on each side of them at the bench to whom they can turn for assistance when in difficulties. Moreover, they learn a great deal, not as the result of direct teaching, but of keeping their eyes open, watching others at work, and instinctively getting to do what they do.

Special arrangements are sometimes made. Certain firms find an older apprentice better able to teach a younger one than a grown man ; whilst others prefer not to do this, either because one boy, being as yet imperfectly taught, may lead the other astray, or from fear that they will get " larking about." More important is the provision of a separate room for the apprentices with a special foreman to teach them. To this suitable work is allotted, which has to be carried out at a price as in other departments ; and usually the boys are gradually drafted among the men in their later years.

To make special arrangements for teaching and to provide a special teacher has many advantages, but the policy is also open to certain objections. The apprentice loses much from not being among the men and from not seeing them continually at work. He may thus miss what is one of the most valuable parts of his apprenticeship—the knowledge that he instinctively acquires from watching skilled men at work. Instead he sees other apprentices who have learnt only part of the trade, and may in this

way acquire from them wrong methods of working. This practice is most common in the Printing Trades, and is only profitable with a large number of learners. Hence the foreman can only give a limited time to each one of them, and the younger boys largely depend on the help and advice of the older ones. Now a youth, being inexperienced, easily acquires wrong notions and in teaching others passes them on, and the bad habits that result are often difficult to eradicate. In any case his help is less valuable than that of a skilled man.

Moreover, a boy needs not only to learn how to do the work, but how to do it on business lines, that is to turn it out at the pace and in the way required. This he can learn best in the shop itself, and the methods of the apprentices' room may not be the same. To some extent, however, these defects are mitigated by drafting the boys among the men later on or by keeping the apprentices not in another place but in a different part of the room or, as in compositing, in the apprentices' "ship." Finally, whilst it may prevent a boy from running wild about the shop, this practice may lead to other abuses. In the Printing Trades, for instance, apprentices in certain firms used to be employed in this way in a separate department and after a short time used to be put on half piece-rates and encouraged thereby to remain at the plain book-setting, where they could earn good money at once, instead of learning other parts of the business; but this abuse is now far less common than it was. Altogether in estimating the value of the apprentices' room one strikes a nice balance of advantage and disadvantage.

To sum up, therefore, the general supervision of a boy mainly rests with the foreman and the detailed teaching with the men. The attention that he gets varies greatly, partly with the terms of his service and partly with the character of the firm. But under modern conditions the boy takes and must take a considerable share in teaching himself, since the wages he earns necessitate this and methods of production make it feasible. Often he has to learn less and to learn it more perfectly, and therefore spends less

time learning and more in practising what he has learnt. Thus the latter becomes more important than before, and a higher level of skill is accompanied by a narrower range.

Secondly, actual teaching often plays a smaller part than the knowledge which a boy instinctively acquires by continuously being among skilled men and seeing them at work. Its results may also be less permanent. When simply taught the right way to do something, he may very easily lapse back into his old wrong methods. But, having seen the men doing it in a certain way over and over again, he comes naturally to do the same, and to hold the tools and work the material just as they do, and as a rule he has ample opportunity to do this. "The boy," I was told, "has power to see for himself. The sensible boy keeps his eyes open and not always glued to his work and watches the men working and sees how they do it and so gets to learn." Providing he does not talk and waste the men's time or his own, no objection will be made, except in a few very bad firms, and he will thus pick up a lot. As one employer put it, "this is a business affair, and we can't sit round in a circle holding a class, and it would be no good if we did." Definite, careful, systematic training is still wanted, but it is wanted in the form of help, advice and guidance to control the boy in teaching himself, and some one is required to see that he does not get into bad habits and methods of working. Whether he does or does not obtain what he needs will depend largely upon himself.

For his own behaviour will do much to determine whether he is pushed on or left to himself or even kept back. If he is civil and obliging and reasonably smart and alert, he will get ample assistance both from master and men. If a lad takes trouble about himself, others will do so for him. "If a boy will look after our interests," said one employer, "we will look after his." If, however, he is lazy and uncivil, foremen and men soon get tired of him and tell him to find out for himself, or even put hindrances in his way. At times, indeed, a foreman may expect too much and lose patience with a dull, plodding boy who is doing his best to learn. But normally if he does not get help, either he is not fitted

to the trade or it is through some fault of his own. If he is slack, careless or unobliging, he puts everybody's back up, and if he does not learn the simpler work, he cannot go on to the more advanced; for as one foreman put it: "If boys are kept back it is because they are not capable of anything better." Abuses do exist, but for much for which the employer gets the blame they are themselves really responsible.

The mode of acquiring different parts of a trade may next be considered. The order in which boys are put through the work will be much the same under any method, though the time taken over it will vary. For in any case certain things have to be learnt at the beginning and others afterwards. The method of Following-up holds, perhaps, the most independent position, since here they have first to learn how to assist a mechanic, and then how to be one. They start, therefore, by becoming good mates or assistants and serve as such. Afterwards they find opportunities to commence as improvers and work their way up, and even when apprentices are taken in these trades, their course is much the same. Otherwise the difference simply consists in the fact that some, bound apprentices for instance, have their progress arranged for them and that others have to make each stage for themselves as best they can.

As a general rule a boy is first put to make himself generally useful about the shop, sweeping up, running messages, getting the men's dinners and so on. Thus by serving the men with tools and materials, he gets to know their names and uses. He also does certain other necessary jobs, like "minding the glue," and in his spare time is given simple work, such as sandpapering, filing-up or breaking up type. Thus whether engaged as an errand-boy or not, he spends his first six months or a year in this way, thereby acquiring valuable and necessary experience. A minority of firms regard this as waste of time and prefer to put a boy straight to the bench, but if it is used in moderation there is much to be said for it.

Coming fresh to his trade, a lad naturally knows nothing

about it, such manual training as he has had being of little direct use. He possesses at best a very slight knowledge of the different jobs, and none whatever of the materials. Now he acquires this and other preliminary information better and more easily when he is knocking about the shop than if he were tied to the bench. Above all, by being about among the men, he gets to know the general character and methods of the trade far better than if he were limited from the first to his one small job. When he does go to the bench, therefore, he has a much clearer idea of what the work is and grasps more easily the part played in it by each particular process.

Secondly, a boy straight from school has been used to have plenty of exercise and variety and does not take kindly to sitting down all day in one place. It is far better, therefore, to start him running about, with at most part time at the bench. Otherwise if he is tied to it all the time, the initial monotony may cause him to throw up the job. Moreover, when he starts work, his hands are soft and inclined to blister, especially where it is heavy and the tools big and hard, and the blisters become sores if he is continually working with them. A little time spent making himself useful, in short, will enable his hands gradually to harden and he will suffer less from blisters.

Thirdly, the present high wages are often more than an employer could afford, unless he could use the boy in this way at first; and, on the other hand, a lad who cannot afford to take small wages is thus enabled to get good money and a fair chance to learn a trade at the same time. Finally, this use of learners has the great advantage that it is not necessary to employ boys solely to do the errands without the chance of anything better; and so it might even be beneficial if the policy of sharing them out among the younger apprentices could be extended.

Hence the advantages of thus employing boys for a short time appear to outweigh the disadvantages, and machine-production often leaves so little work that is suitable for youngsters as to render it necessary. The question depends

rather on how long they are kept at it, and exploitation consists less in its adoption than in its extension. Six months is certainly justifiable, but anything more than this would usually be too long. No hard and fast rule can be laid down, since the time must vary with wages and conditions of service, and according to whether a part of the time is, or is not, spent at the bench. Nevertheless some general understanding as to what under different circumstances would constitute a fair period would be more than acceptable.

After this the boy goes to bench or machine and gets work suited to his capacity. Some typical trades will be described, but a few salient features of his development may first be noticed. Sometimes, especially with skilled machine trades, there is a kind of natural progression from one job to another. The boy is moved from "feeding," "pulling-out," and such like, to work the simplest machine, then he is promoted to rather a more difficult one and so throughout the business. Instances of this are afforded by woodworking machinists, printers' machine managers and engineers' turners. Occasionally an arrangement will be made to put him on to each job in an agreed order. Here the great danger is specialization on to single machines, a danger that is rendered greater where Migration prevails, and, in Woodworking, by the existence of sawmills in which only a few machines are used. In Printing, however, it appears to have been avoided, thanks possibly to its Apprenticeship System. This natural progression, indeed, is not confined to the machine trades, but is found in some kinds of hand work, notably French Polishing, Painting and Upholstery.

Elsewhere the different stages are not always so clear. There is usually some preliminary work for a boy to begin on, though in many cases improvements in machinery have left very little that is suitable for the younger ones; and sometimes the different branches of the work present nearly equal difficulties, so that he just goes to whatever is most convenient. This will largely depend on the orders the

shop happens to be engaged upon at the moment, especially where these vary much and rapidly. In every trade, however, there are easier and harder parts and a boy begins with the former. What actually happens in different cases may perhaps be made clearest by the description of the practice in three important ones, Upholstery, Joinery and Compositing, as given to me by men engaged in them. The first two illustrate respectively the presence and absence of natural progression. The third occupies an intermediate position.

The foreman in the first case was employed by a high-class West London firm. Here the boy starts at the work straight away, tacking the webbing which receives the springs to the frame of the chair, building the foundations for, and then sewing on, the springs. It takes him about a year to do this. He next learns to put on the first stuffing, building it up to give a good foundation for the second and so ensure a firm and even surface when the chair is finished. After mastering the first, he goes on to the second, stuffing, where more skill is required, and then to put on the inner, and finally the outer, covering. This firm takes a great interest in its apprentices, and does not keep them monotonously at one kind of work, but gives them others as occasion offers. Thus in a few years a boy can make a simple chair throughout, and afterwards has to take up the more delicate work, such as stuffing difficult shapes, and cutting and putting on expensive coverings. Where, as in this case, the material is valuable, he can only be trusted with it towards the end of his time. Moreover, in a shop of this kind, working largely in private houses, there are other branches to learn which would not be needed in a wholesale house—such as room planning and curtain and blind cutting. The firm in question indentures its boys with a premium and takes special care to teach them thoroughly. Its work requires a highly skilled type of mechanic.

Very similar descriptions of Joinery were given by two foremen, one of a large furnishing, and the other of a well-known Building and Contracting, firm, each of which does work of a high class. Here each foreman, unlike the

upholsterer, believes in keeping the boy running about the shop for a few months to serve the men and so learn the nature and uses of tools and materials. The next year is occupied in various small jobs, sandpapering, planing-up and, perhaps, making a small dovetail. Then he will probably go to the bench with a man for a year or two, the foreman seeing that he gets suitable work, and then he is given work to do by himself, such as to make a small door. Sometimes he will be moved backwards and forwards, working first with a man, then alone, then with a man again and so on, and, having once mastered the different tools, will learn the other and more difficult parts of the trade as opportunity offers.

The Manager of a large Society Office in Central London described the teaching of compositors. The apprentice starts with a reader for six months, learning to decipher all kinds of manuscript. This appears to be the general rule. He then goes to the store and learns all about the different kinds of type and materials and how to break up and sort type. After this he is drafted into the Jobbing Department, where the apprentices' "ship" contains about six of them and a few men. Here he either gets a little job to himself, like a small "advert," or he works under a man, who supervises and teaches him. Later on he will go into the Newspaper and Book Departments to learn, first, plain book-setting and then display and artistic work. His final year is spent on the Linotype. This firm again is to some extent exceptional. The teaching of the Linotype would not necessarily be done during Apprenticeship, many smaller firms not possessing such machines, and more often than not an apprentice starts in the book, and not in the jobbing, department.

These instances illustrate very fairly the progress of teaching in good firms. Where there is no agreement, its stages will often be less definite, and it will usually take longer, the boy having to take his chance to pick up what he can. In many businesses the chief difficulties are lack of variety in the work, and the fact that the different kinds of

it are apt to come in rushes. So he has to do whatever is in the shop, and, when he has learnt one thing, that to which he ought to go next may not be available. Working for a man, however, often has the advantage that the latter gets a variety and the boy, assisting in what he does, necessarily gets it too.

Finally, learning usually falls into two parts, first to use the tools and to do the ordinary work of the trade cleanly and correctly, and secondly to acquire rapidity of working and master its finer branches. Sometimes speed is primarily a matter of strength, and so can only be acquired in the later years. Hence in the earlier ones the aim should be to give sound methods of workmanship and the power to do a job right ; and one defect of the wage contract is that learners are soon able to obtain goodish money by turning out quickly a lot of common stuff and sacrifice to this both accuracy and finish. Thus even when they are not actually bad, their methods become slipshod and they acquire habits which are difficult to eradicate.

The teaching of the boys is largely influenced for better or worse by the attitude of the foremen and the men towards them. What they do in this way is nearly always regarded in the case of the foremen, and usually in that of the men, as part of their ordinary duties. With the latter, when paid by the hour, the attention given to apprentices comes out of the employers' time and so the latter consider that they have the right to require them, if necessary, to help and instruct the boys. Occasionally a small extra payment is given to compensate for their trouble, this being usually limited to the first few months, and in rare instances part of the premium may be handed over to the foreman. But under modern conditions of short service, high wages and no premium, the employer has not, as a rule, the means to make such payments. With piece-workers, however, unless the boys are kept entirely in the foreman's charge, some allowance is nearly always made ; or a man or squad of men will be allowed to have the benefit of their services free for a few months in return for teaching them.

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Turning to the attitude of the men, therefore, there is little evidence of such a general attempt on their part to keep learners back as is sometimes alleged against them, though there is opposition to them in certain cases. This, as a rule, comes from individuals, and, where it is general throughout a shop or trade, has usually some justification. In Plumbing, for instance, it is due to the difficulty of regulating the number of young mates who will become plumbers. With learners or even improvers it is possible to fix a definite proportion to the journeymen and to stick to it. The number of mates who will succeed in rising is an unknown quantity, and the employers may need a wider margin against emergencies than in other occupations. Hence the trade is liable to get overstocked, as indeed there is reason to think it has done recently, and the fear of overstocking makes many of the men hostile to the ambitions of their assistants. Sometimes, indeed, such hostility may be the only available check on the numbers who enter an occupation; and similar objections are found to teaching them in shops in which boys are employed in excessive numbers, and for this too there is much justification.

Hostility on the part of individuals has several causes. The successful workmen are generally well disposed towards the lads, their own position being secure. The unsuccessful and incompetent fear them as competitors and so are apt to try to keep them back. Often, again, it is a matter of temperament. Some men are too lazy or not sufficiently kind-hearted to take the necessary trouble. They "won't be bothered" with them. Others again do not possess the capacity to teach, and it is the foreman's business to choose the right man for the purpose. Finally much depends upon the boy himself. "If a boy is a good boy, the men will do anything to help him," and though sometimes they may lose patience with a dull but willing lad, it is usually his own fault if they are against him.

The foremen's position has already been dealt with. As a body they take a real interest in their boys, though no more than the men do they "suffer fools gladly." But

those who are willing and persevering, even if somewhat dull, nearly always find good friends in them, and the "bully," whatever his faults and perhaps because of them, usually makes a good teacher. Occasionally they do not give sufficient time to the matter, being too busy with other work, and trouble may now and again arise from the feeling on their part that the employer gets the premium whilst they have to do the teaching.<sup>1</sup> Certain firms recognize the justice of this by giving them a share in it. Again, an employer may leave them too free a hand, and they may keep back the boys from fear of their spoiling work, or, having to get it out at a price, may make them stick to whatever they can do best, and there are always a few men in every walk of life who will never do more than they are obliged. Nevertheless foremen as a body are fully alive to their duties in this respect, and there are not many who do not make the necessary time.

Finally, we may consider briefly the chief defects of existing methods of training. One great cause of trouble is their variety and lack of organization, and this is specially liable to arise out of those in which a boy has to teach himself, as in Migration and "Working and Learning." With them certain difficulties are inevitable, whilst their competition with other methods helps bad employers to evade any more formal obligations which they may have undertaken.

Two sources of defect are most prevalent in connexion with the carrying out of agreements and understandings. The more common, but less serious, of the two consists in leaving a boy to find out things for himself without help, whilst pushing him on as fast as he can learn. In short, he is given ample opportunity to teach himself but little assistance in doing so. As typical of this practice, an engineer's patternmaker, afterwards a foreman and Labour Exchange Official, thus described what happened in his own case :

<sup>1</sup> Their attitude was described as follows : " The foreman often says, ' My father paid so much to apprentice me, and why should this chap's father pay the governor so much when I have got to learn him ? ' "

"The foreman would give me a bit of work . . . which I had to do as best I could without help, being merely sworn at, and told to do it again, if I did it wrong. So I had to learn for myself. When I had mastered one job I was put on to another, and the quicker I learnt, the quicker I was pushed on because in my trade it pays the employer to do this. I got no help from the foreman, who merely gave me the work to do and seldom showed me anything—only what was absolutely necessary. The tools were put into my hands, and I had to find out for myself."

My informant added that the teaching was below the average in this shop, so that it did not fairly represent that given in the trade as a whole.

The defects of this teaching, therefore, are not such as to deprive a boy of a real chance to learn, though, in the case of those who lack ability to do so without assistance, the one thing may lead to the other. Either a lazy or careless foreman leaves him too much to himself or the men are too hard driven to assist him. In any case, being pushed forward as fast as he can learn, he is apt to acquire bad habits and ways of working, and to grow up into a slovenly and inaccurate, though perhaps a quick, workman, especially as firms of this type often require speed rather than accuracy and good work.

In the more serious form of exploitation a boy is only taught one part of the trade and soon becomes expert at it. He is then kept to this and in the worst cases, which happily are rare, for the whole of his time. Thus a practice, that was formerly far more common in letter-press printing than it is now, was that already mentioned of teaching apprentices the book-setting only and inducing them to stick at it, by the payment of half-piece rates, so that they came out of their time very inexperienced and of little use, either to themselves or the employers. More frequently things are not so bad as this, but a lad is made to stay too long at each process before being moved on to the next, more particularly in his earlier years. He will continue to run the errands and do easy boys' jobs until he kicks and many boys are not good at

kicking. In Optical Instrument work, for instance, "a boy will be kept on simple work unless he asks to be put to something else, when they will give it to him—if they are kind." Much, as elsewhere, will depend on himself. If he keeps his eyes open and has the sense to look after himself, he will get pushed on. If not, he will be allowed to remain for a long time at the same work.

Modern conditions, moreover, often render adequate teaching in a single firm impossible, however willing the employer may be to give it. Firms which specialize on certain parts of a trade can only teach those parts, though they may teach them very well. Others only "make trash," that is, do common work. The question, therefore, is whether the former should not be limited to a shorter period of service and the latter debarred from taking apprentices if their work is not good enough. Finally the terms of engagement, notably high wages and short service, often necessitate slower promotion to better jobs than when they were more favourable to the employer, and the freedom of some boys to leave at any time has, for the reasons given, a similar effect.

It is a mistake, therefore, to regard bad faith or deliberate exploitation on the employer's part as the main cause of defective training. For this sometimes circumstances, and at others mere carelessness or want of thought, are chiefly to blame. Thus in silversmithing a few very large firms are more highly specialized than the majority, and their organization requires the boys to be kept to particular departments. Hence they become highly skilled within a narrow range and trouble arises from the fact that only a few shops require their particular form of skill. Excessive nervousness on the part of foremen and men, or lack of control by the employer, is another cause that is more potent than exploitation. Much also is due to sheer carelessness. Finally employers are often the scapegoats of their boys' misdeeds. The boy is slack or lazy or troublesome, and fails to learn properly from some fault of his own. Afterwards he puts the blame for his failure on his

employer and finds plenty of people who will believe him without troubling to inquire into the facts.

Apart from a small minority of really bad firms, therefore, much more harm is done by carelessness and want of thought, and there is little deliberate exploitation. The wonder is rather that under the prevailing conditions there is not more of it. Far more injury is done by the Wage Contract under which boys get their full value as workers, take their chance of learning, and often eventually neglect the latter. Exploitation causes a few to be trained very badly or not at all, and the Wage Contract results in a much larger number being only moderately taught.

It only remains to mention two abuses that are liable to occur in the absence of any agreement. Sometimes a boy will be taught one or two simple things and have the hope of learning the business held out to him. He will then be kept till about eighteen and turned adrift. Secondly, where there is only a loose understanding, a few employers put boys off, either permanently or for weeks at a time, just as they would a man. Occasionally, too, this happens under the Verbal Agreements in Engineering, but is strongly discountenanced by the best firms.

Whilst, therefore, over-specialization appears *primâ facie* to be a probable cause of abuse, it has often serious disadvantages, which even from the narrowest business point of view render it unprofitable. First, a boy quickly becomes expert at a single kind of work and can do almost as much as a man at it, especially where this is of a grade upon which the latter cannot be profitably employed. But whilst he is thus earning a high profit on a small wage—or, as it is often put, much more than he is paid—he is not doing work of anything like the same gross value as a man does. Moreover, he occupies a bench at which an adult could turn out a far larger output, and in London, owing to high rents and rates, bench room is a very expensive item. Hence many employers take as few boys as possible, in order to get the maximum return from each bench.

Secondly, the more quickly and the more completely

a lad is taught, the larger will be the profit which he brings to his employer in the long run. His first few years will probably involve some loss, in the later ones he will be nearly as good as a man and produce almost as much in value as well as in quantity, when still getting apprentice's wages. On the contrary, those who become expert at certain things only quickly reach a maximum beyond which they will not go, whilst their wages rise. In time, therefore, they will earn little more than they get. Thus in the end, if only his period of service is sufficiently long, it is the boy who is well taught who returns the larger profit. And these considerations apply with particular force to London, both because of the great variety of so much of its work and because often the learners taken are too few to enable specialization to be effectively carried out.

In short, so long as they can be sure of keeping him, it pays employers to train a capable boy thoroughly, and push him on as fast as he can learn, and most of them grasp this fact. If, indeed, he is free to leave at any time, a considerable risk of losing him may have to be run. On the other hand, dull lads may be kept back, because the foreman feels that the ultimate return is too uncertain to justify the risk of bringing them on quickly; and in some cases an undue advantage may be taken. Still even so the more common cause of complaint is not that there is no progress at all, but that it is unduly slow, that to begin with they are kept too long upon the errands and upon similar work, and that after this their promotion is not as rapid as it ought to be. On the whole, however, most firms do the best they can for their boys, whilst it must not be forgotten that the taking of learners is a matter of business. The employer must see at least that he does not lose on them, and they have to pay their way in one direction, if not in the other.

Finally, there is in many trades considerable unwillingness on the part of London employers to take and teach more than a very few boys. This again is due to the probability that it will involve either an actual loss or at best

a very small profit. On the one hand, their cost in wages is high, the burden of rent and rates is heavy, making bench room too costly and valuable to be filled with learners, and sometimes there is little suitable work for them, especially for the younger ones. Employers likewise complain of lack of adequate control and the difficulty of getting such as are suitable, and further allowance is required for spoilt material and the loss of the time and tempers of foremen and men. On the other hand, many trades, notably Building, have an ample alternative means of recruiting in the influx into London of well-trained provincial workmen, and in many there is a more than ample supply of adult men. "I don't need to take apprentices," said one employer; "if I want a man there are always some of those poor devils about who are only too glad of a job." The cry, therefore, is that "we want men, not boys," or, if the latter are required at all, it is as labourers rather than as learners.

In London, therefore, learners frequently do no more than pay their way; and in many trades few are taken, whilst of those few some owe it rather to their employers' interest in them than to business considerations. To this statement, however, there are exceptions. For the reasons already given, large numbers of apprentices are employed in the Printing Trades, in which the provincial supply proves a less adequate substitute than it is elsewhere. Again, in certain parts of Engineering, such as Ship-Repairing, learners are numerous, partly to keep up the supply of sea-going engineers, and partly because the extent of the provincial influx is limited, though by no means negligible. Nevertheless the fact remains that over a great part of London industry the demand for learners varies from small to very small. The difficulty is not that employers fail to teach the boys they take, but that they will take so few of them, and that those who teach best, teach fewest.

## CHAPTER XII.

### THE SCHOOL AND THE SHOP.

Reasons for growing importance of Evening Schools—Various Types of them ; Evening Continuation Schools ; Technical Schools ; Trade Schools—Increase in Teaching of Manual Work most marked—Different Branches of Teaching—Technical Education proper—Instruction in General Principles or Higher Trade Teaching ; help given by this in learning manual work—Higher and Finer Parts of Manual Work—Teaching of ordinary Work of a Trade : Greater Variety, Better Quality ; More Thorough Teaching ; Case of Sectional Division of a Trade—Broadened Outlook—Supervision and Control—Exploitation—Failure to reach those who need them most—Value of Work they do—Value of Control between fourteen and sixteen in Day Trade School—Value of Schools generally and to different classes of Boys.

Estimates of their Scope and Utility—By Employers and Foremen : for general principles ; for technical subjects ; for higher branches or things which do not come into the shop—Opposition to attempt to replace shop by School for ordinary work of a trade—Indirect Value—By Boys : Drawing and Design ; Value of practical work ; Better quality and greater variety ; Allied trades or branches : Little importance attached to technical subjects—Some difference in views of boys and employers in some cases : marked similarity in others—Teaching Staff hold much stronger views.

Value of Schools varies—Favourable Conditions—Illustration from Cabinet Making and Silversmithing—Unfavourable Conditions—London Trades when considered from this point of view fall into Five Classes.

Relations of School to Shop—Two Important Facts—Decrease of Latter's Power to Teach—School still supplementary to it—Illustration from utility of Schools to different Boys—Why this is restricted—Value of the Workshop—That of School greater with, than without, co-operation between them.

Difficulties of Trade Teaching at School—Difficulty of keeping in touch with actual practice ; likely to be increased with compulsory attendance—Failure to work under competitive

conditions—Inability to work to scale—Difficulties connected with the supply of teachers—The Voluntary System of attendance and its Results ; Limitation of Choice of Subjects ; Absence of Control and Failure to keep boys ; Best Form of Organization Impossible—Summary of Existing Position and Changes Required.

UNDER modern conditions the workshop still provides the fundamental basis of trade teaching, but from various causes it cannot alone and unaided do all that is required. What these causes are need not be repeated. Their results are, first, that the boy has to do more for himself than formerly, and, secondly, that it is becoming more and more difficult to learn a trade throughout in a single firm. Moreover, modern industry frequently requires an increasing amount of technical and scientific knowledge that it is beyond the power of the workshop to supply. Hence the Trade or Technical School is coming necessarily to play a growing, though still, as will appear, only a supplementary, part in the training of the artisan ; and the present chapter, therefore, seeks to analyse generally, but with special reference to London, the extent and value of its work.

Before considering this more fully, however, it will be necessary to define carefully certain terms, such as Technical Training, which in common discourse are apt to be used in a somewhat slipshod fashion. Technical and Trade Teaching form part of the wider problem of continued education, their function being roughly to do for the mechanic and craftsman what the ordinary Evening Continuation Schools do for the commercial employments and what they might and ought to do for unskilled labour.

Evening Continuation Schools or Classes are often referred to in a generic sense to cover all these things, but the name is used primarily to denote those which are engaged in carrying on during the years of adolescence work done in childhood by the Elementary School, or in giving commercial education. Thus, on the one hand, they cover the higher branches of subjects already taught or more advanced literary subjects. Their curriculum, therefore,

includes history and geography, ancient and modern languages, mathematics, science and drawing. Certain kinds of manual work—wood-carving, clay-modelling and repoussé work—are also taught, less in relation to particular trades than for their educational value. On the other hand the commercial departments contain classes for shorthand, typewriting, book-keeping, and so on, and so provide directly for the needs of the commercial employments. In London the County Council has recently reorganized its system, and the changes brought about in this and other respects will be described in the next chapter. It will lead to greater clearness, therefore, if the term Evening Continuation School or Class retains this more restricted meaning ; and to denote the more general sense the simpler phrase Evening School or Class will be used.

When we come to deal with Technical and Trade Teaching, however, we are concerned not with two separate subjects, but with two more or less distinct branches of the same one. Thus, as Sir Philip Magnus has said:—

“ The term generally adopted to designate the special training of persons in the arts and sciences that underlie the practice of some trade or profession is called Technical Education. . . . In its widest sense it embraces all kinds of instruction that have direct reference to the career a person is following or preparing to follow ; but it is usual to restrict the term to the special training which helps to qualify a person to engage in some branch of productive industry. . . . This specialized education may consist of the processes concerned in production or of instruction in art and science in its relation to industry, but it may also include the acquisition of the manual skill which production necessitates.”<sup>1</sup>

Hence the term Technical Education needs in the first place to be used in this wider sense. But it contains two branches which may be described as Technical Teaching proper and Trade Teaching. In practice these things are not always distinct and not seldom overlap one another,

<sup>1</sup> Article on Technical Education in the *Encyclopædia Britannica* (Eleventh Edition), vol. xxvi., p. 487.

and this leads to inconsistency in the meanings attached to them. Certain kinds of teaching, moreover, are on the border line between them and cannot be definitely assigned to either. Hence it is important first to state clearly the meanings to be given to them and, secondly, to distinguish the different kinds of instruction that are included under the heading of Technical Education<sup>1</sup> in its wider sense.

Technical Teaching proper is perhaps best defined in the words of the Act of 1889 :—

“ The expression ‘ technical instruction ’ shall mean instruction in the principles of science and art applicable to industries and in the application of special branches of science and art to specific industries or employments.”<sup>2</sup>

It is thus limited to the higher branches of knowledge connected with a trade, which are mainly, but not exclusively, utilized by those engaged in its upper ranks. The study of them, therefore, must, at least so far as the average man is concerned, be preceded by considerable knowledge of the manual work.

Finally, Trade Teaching in a School which either precedes, or is concurrent with, that of the shop corresponds to the “ manual instruction ” of the above Act, as “ instruction in the use of tools, processes of agriculture, and modelling in clay, wood and other material,” which must not be confused with the Manual Training of the Elementary Schools. The vital distinction, therefore, is between classes for learning the ordinary work of a trade and those for acquiring the

<sup>1</sup> For the remainder of the chapter Technical Education refers to this wide meaning and Technical Teaching to the narrower one.

<sup>2</sup> An Act to Facilitate the Provision of Technical Instruction, 52 and 53 Vict. c. 76. The Clause continues :—“ It shall not include the teaching or practice of any trade, industry or employment, but save as aforesaid shall include instruction in the branches of science and art with respect to which grants are for the time being made by the Department of Science and Art and any other form of instruction (including modern languages and commercial and agricultural subjects) which may for the time being be sanctioned by the Department, on a minute laid before Parliament and made on a representation of a local authority that such a form of instruction is required in its district.”

necessary scientific knowledge connected with it, and though in practice overlapping is frequent, this distinction must always be kept in mind.

Technical Teaching proper is playing a growing part in industry as more and more scientific knowledge is being required of the workman. Its growth is no new thing. That in the part played by Trade Teaching is both more recent and more marked. Each kind, indeed, is becoming increasingly important, but it is in relation to the actual manual work that the development is greatest. Both Technical and Trade Teaching, it may be added, are usually given in the same institute or school.

We may now turn to consider the different branches of Technical Education. First there is the teaching of the different sciences bearing upon various industries and of their application to them. The employers' demand for this is not limited to the case of fully trained men, but extends in some trades to learners as well. Thus certain Engineering firms require two years' preliminary technical training from their learners and Labour Exchanges receive orders for youths or improvers "with some technical knowledge."

Secondly, there is instruction in what may be called the General Principles of a trade. A firm often cannot do more than teach the actual manual work and not also the "why" and "wherefore" of it. The boy learns how to do it, but detailed explanation of the principles which underlie it is not possible. Thus more than one employer has said: "We cannot sit round in a ring and hold a class; we have got to attend to business." Nor is it altogether necessary, or even desirable, that they should do so, for instruction in such principles, in the connexion between the parts of a trade, and in the character, qualities and working of its materials, tools and machines, comprises one of the special domains of the School. By lectures and in other ways it can thoroughly impart these things and their relation to one another and give each pupil individual tuition according to his needs. The teacher is there simply and solely to teach, with the foreman it is but one duty among many.

Here, indeed, the dividing line between Technical and Trade Teaching is narrowest ; but these last, together with certain allied subjects, such as drawing and design, are best classified as Higher Trade Teaching.

A word may be said about its relation to the manual work of an industry. It does not, it is true, actually teach the "use of the tools," but it nevertheless gives considerable assistance to a boy in acquiring the "practical work." He learns more quickly and more easily when he knows the connexion between different things than when he just learns each of them as it happens to come to him at the bench. Hence, when the instructors have real practical knowledge, the School is a most valuable adjunct to the shop. The boy, having had these things explained to him of an evening, grasps each new kind of job more readily, and takes an increasing interest in what he is doing because he understands it better. Last, but not least, he has more confidence in himself and much that formerly was hard he now finds to be easy. When therefore they are in a position to give a good all-round workshop training, the employers' contention is probably right that the Schools should confine themselves to imparting these branches of knowledge, or, as one of the instructors said, referring to a certain firm : " They think, and quite right, that they can teach the trade completely in the shop, and so ask that the boys they send to us shall spend their time on other subjects." Thus, where they are so circumstanced, such a division of labour as " the shop for practical work, the school for general principles " is a sound one.

Thirdly, the Schools have a big part to play in teaching the finer kinds of manual work, even where considerations of space limit their utility in the more elementary ones. The scale of Building, and more particularly masonry and brickwork, requires room to put up and pull down walls, and here the School is at a disadvantage.<sup>1</sup> Work with

<sup>1</sup> In certain cases the difficulty may be partially, but only very partially, overcome. Thus in the School of Building at Brixton a small cottage has been erected in the large central hall.

models is a poor substitute for actual bricklaying or masonry, just as making "soap-boxes, brackets and that sort of thing" in an Elementary School is of little use for the joiner's shop. But the smaller scale and greater fineness and delicacy of these higher branches make them far more suitable for teaching in this way. One may instance gauge-work in bricklaying, modelling and decorative work in plastering and the finer display work in compositing. Moreover the ordinary contract to teach does not always include these things, but only the trade as practised by the average journeyman. To learn them, therefore, a boy has first to make a start for himself and show "aptitude" before he gets his chance in the workshop, especially when the modern contract leaves the employer so little margin against loss that otherwise it would be impossible for him to teach them. Consequently the boy must co-operate with his master by getting "an insight into them" for himself, for where he does so a decent firm will always do its best to give him a chance to learn more.

Fourthly, there is the ordinary work of a trade and in respect to it modern conditions are once more limiting the power of the employer to teach and giving the Schools a larger part to play in supplementing the workshop. As to whether they can do this successfully, opinion is not unanimous, but it is certainly becoming more favourable to an affirmative reply.

In the first place, each shop can only teach such work as it gets, and every contract has an implied limitation to this effect. Even without actual specialization of output the business of many firms is limited in quantity or quality. Thus in Silversmithing some confine themselves to large, others to small, work and only a limited number do both kinds. In this and other industries, again, some businesses do not get the best qualities, or, as in Engineering, certain machines may not be found everywhere. Sometimes, too, industrial progress tends to divide a trade into sections or branches. Thus in plastering solid and fibrous work are often done by different firms, and whilst it is important for

the workman to know both, the employers may only be in a position to teach one. Now for all these things the Trade School can provide a remedy, and can enable a lad to learn, or at least to make a start at learning, these parts of his business; and in addition to this they give him a general widening of experience. "You get to see and know other chaps," said one young silversmith, "who are doing different sorts of work to what you are."

Further, the Trade School or Class can set about teaching particular pieces of work far more thoroughly than the workshop can. In the latter the boy's progress is quite legitimately influenced by business considerations, and he has to learn his trade bit by bit as the orders come in. In the former he can go right through a job from the beginning, making the designs, and then and there doing the whole thing. He thus sees it and his trade far more as a single entity than when he is learning it piecemeal, and nothing could be more valuable. Moreover, by undertaking elaborate things, he can exercise his artistic and constructive powers.

Finally, apart from its actual teaching, the School exercises a valuable influence, not only on the employment and instruction, but on the general conduct and outlook of its students. It can guide the boys as to what work they take up and rectify mistakes more readily than is possible in the workshop. Direct influence upon employers it can seldom exert, but it can help and encourage learners to assert themselves and press their claims, and in this and other ways keep the learning of a trade clearly before them, so that its regular students at any rate seldom throw away their chances from mere restlessness or for the sake of immediate high wages.

This influence is specially helpful to those who have no agreement or understanding. Migration is most likely to be successful where the improver has the expert help and guidance that the Schools can afford. So too they can do something to persuade those who are "Working and Learning" to stick to decent jobs. Their opportunities, however, are perhaps even greater in the case of Following-Up,

because sometimes, and notably in Plumbing, they have specially good facilities for teaching the actual work of a trade. Further they can do something for the exploited apprentice and a good deal for the over-specialized worker, whom, as in the Boot Trade, they may enable to gain experience of several processes instead of being confined to one or two only.

The value of their work in these respects, indeed, is limited by the small proportion of the boys who attend them and particularly of those who most need to do so, and it would probably be increased enormously under a system of compulsory attendance. Even, however, if their practice falls far short of the ideal, they already do good work. Even the cleverest need control and guidance. The average boys get much that even a good shop cannot afford, and especially an amount of individual attention, which an instructor, who is there solely to teach, is able to give. Greater breadth of view and wider experience they can hardly fail to supply, simply because they are not the shop, and they may sometimes lead a lad to appreciate more fairly the treatment he is receiving from his employer.<sup>1</sup> Finally increased realization of what a fine thing a skilled trade is leads to increased interest, especially where difficulties are removed in advance, and new jobs in the workshop are found to be easy instead of hard. Similarly one of the greatest advantages of the Day Trade Schools, the work of which will be described more fully in the next chapter, lies in the control they keep over their students in the two first and most dangerous years of their working life.

To sum up, therefore, the work of the Technical and Trade Schools has several branches : first, technical and scientific teaching in the narrower sense ; secondly, Higher Trade Teaching ; thirdly, instruction in the finer or more special branches of the manual work ; fourthly, that which supplements the skill imparted day by day in the workshop,

<sup>1</sup> Thus the Head of one Department would hear boys saying : " Well, the old guv'nor isn't a bad sort after all ; but that fellow's got a rotten guv'nor."

and, lastly, such control and supervision as has just been described, which is as necessary as the actual training and no less for the artisan than for the low-skilled worker. The first of these is especially valuable to those who are entering the higher ranks of industry, the second and third to those whose workshop training is otherwise ample, and the fourth is chiefly useful to the average boy. The last is essential to all ; and for all alike it may be said that the aims and results of Technical Education should be to set right defective training, to complete what is unfinished, and to make what is good and adequate to be better and more adequate still.

The actual value of the Schools as it appears to those chiefly concerned may now be shortly considered, and between them, and between different trades, striking points, both of similarity and contrast, will be found. Employers and their foremen, as is perhaps natural, attach least importance to the manual training. Usually they regard the shop as able to do all that is required for the latter and further use of the tools after working hours as neither necessary nor beneficial. Not too tired to profit by evening classes, the boy nevertheless requires a change, "something recreative to interest him after his day's work." Or again, "the boys are all happy and contented and quite fresh : for after all their work at the Schools is a change for them, not a continuance of their shop work." <sup>1</sup>

It is in reference to such matters as scientific and higher trade teaching, therefore, that they regard most favourably the work of the Schools. Frequently they admit them to be in a better position than the workshop to teach these things. They even propose co-operation on the lines that the School shall impart in the evening the principles governing the work which the boy practises during the day time, the sciences which bear upon it, such as mechanics and geometry for engineers and boilermakers, chemistry for tanners

<sup>1</sup> In this case the boys were employed in an engineering workshop and spent their evenings learning the science and general principles of their business.

and leatherworkers, and also certain forms of knowledge, allied to different trades, which are an advantage to, though not absolutely a necessity for, the artisans concerned. Such are Drawing and Design, Building and Machine Construction, and Modelling, more particularly the two former, to which they are particularly favourable. Moreover the general principles will include not only those of the particular craft, but those also of the whole industry to which it belongs.

Now these things fall to a great extent outside the scope of the workshop and are not included in what the average employer undertakes to do for an apprentice—namely, to make him a good workman, which is all, as a rule, that he has the means to do. But by learning these other things boys are enabled to become better workmen, and many employers, therefore, encourage them to use the Schools for these purposes. Not a few of them, indeed, regard their value as limited to this.

Nevertheless masters and foremen, on the whole, though with less unanimity, admit within certain limits that they can teach parts of the manual work or assist boys to learn it. Most of them regard the shop as, in the Aristotelian phrase, “prior in nature” to the School, and hold that for work in the latter to precede work in the former, or even for it to begin at the same time, is simply to try to teach the advanced subjects before the rudiments.

The workshop teaches the latter ; often it alone can do so. Later on the School steps in to help with the former, and especially with the finer branches of the trade, such as gauge-work in bricklaying,<sup>1</sup> which only a few get a chance of doing on the building. These subjects it can teach, not indeed completely, yet sufficiently to enable a boy to make a start and later on to get a further chance at his job. Modern conditions, in fact, often render the latter possible only where a boy has already some knowledge of a process, so that to teach him the rest of it will be less costly to the

<sup>1</sup> This is paid at the rate of  $\frac{1}{4}$  d. an hour above the ordinary rate for Bricklayers.

employer. Similarly, where certain things do not come into his workshop, the insight into them and the wider experience which the School gives help a learner to obtain an improver's job in some other firm in which they do.<sup>1</sup>

But employers and, to an almost equal extent, their foremen resist any attempt to replace the workshop by the Trade School. They are prepared to admit its value for the purposes already described, or even to assist those who have been exploited or failed to use their chances to make a fresh start. But to anything beyond this they are steadily opposed, except sometimes for preliminary training, for which there is a considerable demand in Engineering and a growing one in some other industries. But to "teach a boy to use the tools," i.e. to do the ordinary work, the proper place is, they maintain, the workshop, which the School can supplement, sometimes largely, but which it cannot replace.

Some employers, moreover, value the Trade Schools mainly or even entirely for their general control over the boys or for the incentive they give to further effort, increasing their interest in their work and keeping their minds fixed upon it instead of upon other things. Thus it is often said, for instance, that "the boy who is going to get on attends a Technical School," whilst the Manager of a large Furnishing Firm declared that what they taught was of little use, but that attendance at them was encouraged because they "kept a boy's thoughts fixed upon his trade."

The boys, on the other hand, attach the greatest importance to drawing and design, more particularly in combination with definite pieces of work, when "you take a job and

<sup>1</sup> On this point the Foreman of a firm of Braziers was emphatic.

"Their [the Trade Schools'] great value is for a boy to learn cutting out, a thing of which, owing to the great value of copper, we cannot afford to give a boy much, at any rate until his last year. For if he does it wrong, he may easily spoil a lot and cause a great deal of loss. They, therefore, by enabling him to learn just when he will bungle most, get over this difficulty and enable him to learn it so far that he will get a better chance in the shop."

work right through it, making the drawings and all.”<sup>1</sup> Of those I saw three out of every five gave one evening a week entirely to it, and of the rest some intended to do so later, or were studying it not as a separate subject, but in connexion with whatever else they were doing.<sup>2</sup>

Second in importance comes the chance of obtaining increased variety or better qualities of work as compared with the workshop, or of getting “general work,” as they themselves say, whilst they can broaden their experience and outlook by meeting and talking with “chaps from other shops.” Thus a young Brass Finisher, who was not employed under any agreement, said—

“In the shop you only do one thing; here you do everything”;

and a boy learning Cabinet Making with his father, a small master—

“With my father I get a medium class of work and here the best.”

Others described themselves as “practically learning the trade,” or as getting “practice” and “practical work.” One boy had got promoted by his employer as a result, and another, engaged at “filing-up” at a silversmith’s, had been promised a chance to do “raising” and “hammering,” if he would obtain an insight into them first at a certain Technical Institute.

Third place is assigned to the continual presence of an instructor to remove difficulties, correct mistakes and explain matters clearly, combined with the power to choose one’s own work—

“You can do what you like in the School. In the shop you are only given what you can do; but here, if you don’t know, you are shown, or if you are in difficulties you ask the instructor and he tells you.”<sup>3</sup>

<sup>1</sup> By the kindness and courtesy of Principals and Instructors I was able to interview a considerable number of boys at various Schools and from them obtained the opinions quoted in the text.

<sup>2</sup> In some of the Artistic Trades modelling occupies a similar position.

<sup>3</sup> In this case the speaker was not a learner under an agreement, but a young wage-earner “picking up” his business.

Others spoke of power "to take your time and make experiments," of "increased confidence" and of "work made easier." A few were learning an allied trade or branch to supplement their own, usually where modern developments were separating processes that were formerly united. Thus engravers were learning die-sinking, a silver spinner silversmithing and bookbinders both forwarding and finishing.

There is, therefore, much both of similarity and of difference in the attitude of employers and learners. The most remarkable divergence was shown by the small number of boys who attached importance to purely technical and scientific instruction. This is partly due to special reasons. Trades like Engineering were not well represented among those whom I saw, many of them being engaged in the artistic crafts and other occupations in which manual dexterity is still vital. Secondly, many of them were wage-earners teaching themselves, or came from firms whose output was largely specialized. Thus they had still much to learn at the School in the way of "practical work." The employers, on the contrary, mainly represented the best and most regular methods of teaching, which leave less scope for the School in this direction and make its chief spheres the finer branches of a trade, its science and its principles.

Nevertheless the small importance attributed by the former to these two last matters does illustrate their failure to appreciate them properly. It is perhaps inevitable that they should use the Schools more for the sake of immediate assistance in earning wages than for the purpose of mastering the broader principles that underlie their employment. What is disquieting is their failure to grasp the connexion between the two things or to take an interest in the latter.<sup>1</sup>

Apart from this the chief difference consists in the far greater appreciation by the boys than by the employers of

<sup>1</sup> Thus at some Institutes attendance at lectures on theory and principles of a trade used only to be secured by making it a condition of attendance at the "practical" classes. This object is now likely to be more fully attained by the adoption of the course system by the County Council,

the instruction in "practical work," which again is likely to be especially useful to those who are teaching themselves. Other differences are mainly in details. Points of agreement are also numerous. Among them are the importance attributed to drawing and design, the value of the School in imparting the finer branches of the work and in filling gaps in workshop experience, and its power to give wider experience and adaptability or greater variety. From both sides, too, it is regarded as a supplement to, not a substitute for, the shop, and, apart from the two main points of disagreement, it may be said that both parties recognize the same elements of value, though they view them from two different standpoints.

The opinions of the teaching staff, on the other hand, often go much further than those either of the employers or of the boys. They likewise rely upon Technical Education as a means to improve still further those who are well taught and to perfect those who are not, but many of them regard workshop training as in itself so narrow and insufficient as to compel a learner to look elsewhere for almost everything of value. Hence in their view the only real chance for many lads is provided by the Trade School. Such an attitude, indeed, is not universal among them, and in their extreme form such views very much exaggerate both the evils that exist and the part which the Schools take and can take in Industrial Education, much as the employers are liable to under-estimate both. The truth probably lies between the two—namely, that the workshop still remains the centre and basis of trade teaching, but that the School is an auxiliary to it of great and always increasing importance.

The scope of the latter also varies greatly from trade to trade, and is largely determined by two things, the size and value of the product and the amount of craftsmanship involved; and so the three most necessary conditions are:—the production of an article of small or moderate bulk, the need of artistic ability, or at least of manual dexterity, in the worker, and the use of a cheap raw material.

The matter may be illustrated by the case of two trades,

Cabinet-Making and Silversmithing. In many of its branches the former secures all three advantages. Furniture only requires a shop of moderate size, so that difficulties of space do not arise to any great extent. A single piece of work provides considerable variety, takes time to make, and thus gives the means for much instruction. Finally the raw material is not expensive, and the finished articles are easy to dispose of. As a rule the boy is allowed to keep the latter on paying for the former.

Again, in spite of an increase of machine production in the cheaper lines of goods, Silversmithing is as regards size and craftsmanship even more favourably situated. The value of the material too causes employers to prefer boys with some previous experience, who have, in short, been "licked into shape" elsewhere; and they look with greater favour on the Day Trade Schools than they do in other industries. It suffers, however, from one great disadvantage. Silver is too expensive for use in the classes, and base metals, usually brass, have to be substituted. Now silver and the base metals require somewhat different methods of treatment, and so, after working on the latter, a boy "will sweat silver down to absolutely nothing." But even so Silversmithing and the other artistic crafts provide an unusually favourable field for manual trade teaching.

At the other end of the scale are industries in which such instruction is difficult to give, at least until the later stages. Sometimes, as with the manufacture of light leathers, there are a number of closely related processes which it is not easy to teach separately, or indeed at all, except by establishing a whole factory for the purpose. Again, questions of space may render it impossible. With semi-manufactured articles, or such goods as brushes, of which very large quantities are turned out in a short time, difficulties in disposing of the product may be insuperable. Finally, high prices of material, as with saddlery, or as already mentioned in silversmithing, are sometimes a great obstacle, but at others it can be partly or wholly overcome, as by the use of cardboard patterns in connexion with copper-smithing.

In reference to the possibilities of trade teaching, therefore, London industries appear to fall into some five classes :— first, those in which either it is not possible, or, as with many branches of Pianoforte Manufacture,<sup>1</sup> has not yet been developed ; secondly, those in which it is confined to science, theory and general principles ; thirdly, employments in which the Schools can do much to teach the manual work after its earlier and easier stages have been passed but not until then, and which include many of the Printing and Building Trades ; fourthly, those in which conditions are specially favourable to them, as in the instances just given, and lastly those, like Engineering and Boilermaking, in which the value of the manual teaching is great, but that of the technical and scientific training very much greater.

It is now possible to summarize the present relations of the School to the workshop. Two facts of special importance emerge. First, there is much that the latter formerly gave which it can no longer guarantee, so that the former is required, and is in a position, to take its place and to do much that was regarded as entirely within its sphere. Secondly, the School cannot by itself teach a trade, so that its instruction still only supplements, though to a greater extent than formerly, that of the private firm. The workshop remains the proper place in which to learn, and round it the teaching must still centre. For a man has to work in the shop, and as a boy must learn to do so according to the methods, principles and conditions that prevail there. Therefore the training of the shop, by the shop, for the shop and in the shop is fundamental. It is one thing to learn at the School what the shop cannot teach, another to learn at the latter independently of the former. So, too, the Day Trade School teaches a boy the elements of his business, and on the whole under better conditions, before he starts in the factory, combining extended general education with elementary trade teaching. It also guards him against the special

<sup>1</sup> The establishment of a Pianoforte Trade School is at present under consideration by the County Council.

dangers of early adolescence, but in no sense does it claim to teach a trade throughout.

Now in these cases the School does important work, but in all of them it is supplementary to the workshop and not a substitute for it. To a great extent this is inevitable. For a boy spends only from four to eight hours weekly for part of the year in the one and from forty-eight to fifty-four for the whole of it in the other. But even where, as in the Day Trade Schools, the former occupies a larger share of his time, the general position is substantially the same. The two continue to co-operate, only the School sometimes plays a larger part than it does at others. But its place is still subordinate and that of the shop preponderant. For the boy has to be trained for the purposes of the latter, and therefore any attempt to upset seriously this relation between them would be of doubtful value.

For, as explained in an earlier chapter, what is learnt indirectly and instinctively is often as important as what is definitely taught. Much of his trade a boy acquires unconsciously by working with and among skilled men, and keeping his eyes open to see what they do and how they do it. The extent of this, indeed, is seldom realized. It is a thing that only the workshop can provide ; and this alone gives it an enormous advantage. Moreover, even where " in the shop a boy gets taught to work only one machine " and in the School " he can come and learn all," yet the part of the former in showing a lad what he requires to know and by what methods he shall work, is none the less vital. For at the School he has to choose his work according to the conditions of his trade, and he can only make the right choice by first getting workshop experience. In short, his work at the School has to be properly co-ordinated with his work in the shop, and this can only be done by making the whole of the teaching in both alike centre round the needs of the latter.

Finally there remain to be considered the difficulties that face the Trade and Technical Schools in carrying on not only their present work, but the large extensions of it that

may legitimately be expected. In this chapter only those which hinder them from actually doing this will be considered, and treatment of the causes which prevent boys from fully utilizing the facilities they provide must be postponed to the next chapter.

Perhaps the greatest of the difficulties in question is that of keeping their teaching and methods in touch with workshop conditions. In the past their failure to do this has been one of their greatest mistakes ; and even now complaints to this effect are not infrequent. For the newer Schools more particularly have still got to buy their experience and learn from their errors. The need, however, has never been so fully realized as it is now.

The difficulty arises partly from the fact that trade, as opposed to technical, teaching is not suited to, or has not been developed to suit, some industries, and that it is only available in certain branches of these, or at a later stage. Now the harder it is to give any teaching at all, the more easy will be its divorce from that of the shop, and where the methods of the Schools cannot be upon the same general lines, their value is correspondingly limited.

Again, in a class, a boy does not always work under competitive conditions ; and this constitutes a second obstacle. At the machine or the bench he has to produce within a certain time and at a certain price. In the Schools he proceeds rather on educational lines, taking his time and not hurrying and often aiming primarily at artistic perfection. The workshop, on the other hand, requires this less than to have the work carried out both well and rapidly, combining, in short, speed and accuracy. The most valuable results, therefore, will be obtained by the former in proportion to their power to teach work under the conditions required in ordinary production and to their success in avoiding unsuitable methods.

The responsible authorities are fully alive to this and have taken steps to meet it, and the most successful Trade Schools attain this object and at the same time reach a high standard of workmanship. Thus even when the diffi-

culty has not been completely overcome, their teaching retains a high practical value and acts as a corrective of bad workshop influences. Nevertheless a difficulty of this sort does not cease to exist when it has been removed for the time being. Workshop methods are continually changing and developing and great vigilance is necessary to ensure that those of the School shall continue to keep in touch with them.

Thirdly, want of space often prevents the latter from doing the work of a trade as it is ordinarily done : for they cannot always work to scale. This matter has already been dealt with, but one or two examples may be given. Thus a joiner's foreman told me : " Originally the boy goes to the top shop where the deal work is. This is where the Technical Schools are at a disadvantage since they do not and often cannot operate upon deal, but only use the smaller woods and work on a smaller scale." Again, a foreman stonemason said : " The Schools cannot teach practical work as the workshop can. For one reason they do not work to size, and you cannot learn to work from models and a one-inch scale. The School cannot—partly from want of space—teach the plain, simple work which you must learn first and therefore in the workshop. What the School does teach is the finer and more intricate work, which is specially useful to those who want to rise in the world."

Other considerations restrict not so much the amount that a School can teach, as its power to do so to the best advantage. The first of these concerns the supply of instructors. The latter require a special combination of qualities and need not only to be good craftsmen, but to be versed in the theory and principles of their business, and to possess capacity to teach. Now all these powers are not found in a very large number of men, and thus failure to satisfy one or other of these requirements excludes or unfits many for the task. On the other hand, the number of available foremen and leading hands is not very large, and some of them do not believe in a Trade School or do not

wish to teach in one. Hence the supply of good teachers is limited.

Moreover they should maintain as much as possible their connexion with the actual work of their trades in order to keep the practice of the Schools abreast of industrial development. It is best, therefore, if they can continue to work at them. This particularly affects the younger men. When teaching only in the evening they can, and often do, spend the day at the bench, and a few evenings a week at the class. When teaching in the daytime, however, they can at best only put in part of it in the shop, and eventually cease to work there at all, since an employer will naturally prefer a full-timer. On the other hand, if he is not actually working at a trade, a man requires a wide experience if he is to keep in touch with all its changes, and this experience the younger teacher naturally cannot possess. Hence their capacity is limited as well as the supply of them.

Lastly, the fact that attendance is voluntary further hinders the Schools. This matter will be dealt with more fully in the next chapter, but its chief results may be briefly mentioned here. First, it is difficult to induce boys to take up anything but what bears directly on the manual work of their trades, and they often refuse to attend classes upon the theory and general principles. This has now been partly overcome by making "courses" compulsory in Junior Commercial and Technical Institutes, but the change has been accompanied by a serious drop in the number of students. Secondly, there is not sufficient hold over them to render possible an organization of different kinds of teaching according to the ages of the students. This difficulty also the new re-organization scheme of the London County Council is attempting to overcome. Thirdly, a very large number drop out in the course of a single session or fail to keep up attendance for more than one.

These do not exhaust the difficulties in the way of technical and trade teaching in the Schools. Others will be dealt with in the next chapter, and more particularly

those in which the special conditions prevailing in London are of importance. To sum up, therefore, their activities are necessarily confined to supplementing and perfecting the training of the workshop. But within this limitation they have a great and growing part to play. Much as they have done in the past, in the future they can and should do more. If they can only supplement the work of the shop, they are doing so to an ever-increasing extent. They can continue to impart those higher branches of knowledge which have always been their particular field; they can supply deficiencies and remedy defects in workshop teaching, and can often give a better preliminary training between fourteen and sixteen than the latter can. But to fulfil these functions completely, they have still far to go and possess as yet neither the organization nor the facilities required for the purpose. Moreover, their future development will be even more extensive than intensive. Much as they may improve their teaching, they will do even more by increasing the number to whom they give it from the present small fraction of the juvenile population until they come to embrace the whole.

## CHAPTER XIII.

### TRADE AND TECHNICAL SCHOOLS IN LONDON.

Object of the Chapter—Manual Training—Its Establishment—Children to whom it is given—Its Real Object—To increase General Intelligence and Dexterity—Objections urged against it—Unpractical Character—Over-Stocking—Its Merits—Better Choice of Employment assisted—Early Test of Capacity.

Establishment of Central Schools with Industrial or Commercial Bias—To provide for abler Children up to the age of 15—Entry into such Schools—Their Object and Curriculum.

The Day Trade Schools—The number and age of their students—The Character of their Teaching—Relation of General to Trade Education—Their Objects—Aim at Fitting Boys for Higher Posts in Industry—Their Advantages over the Workshop—Criticisms of their work similar to those of Manual Training—Growth of support from Employers—Care required to avoid repetition of early mistakes.

Continued Education—Its two parts—Number of Classes and Students—Proportion of them dealing with Literary, Commercial and Industrial Subjects—Proportion of Boys under twenty in attendance: in all subjects, in Skilled Trades—Numbers attending at each year of age.

Proportions at different ages—Proportions earning Grants—Large Proportion who receive no real continued Education at all.

Re-organization of London Evening Schools—Its Salient Features: Grading of Institutes; Adaptation of Teaching to Ages of Students; the Course System—Value of the Scheme—Its Prospects.

Recent growth and present position of Evening Trade Schools proper—Enthusiasm of many Students—Gradual Creation of "Habit of Attendance"—Means by which Students are attracted—Influence under a Voluntary System of Students and others—Part played by Voluntary and Official Agencies.

Attitude of the Parties concerned—Stages in the Development

of an Institution—The Employers—Little either of Root and Branch Opposition or of Enthusiastic Support—The Great Majority give a Moderate Support, and try to influence their boys to go—Actual Compulsion considered inadvisable.

The Question of Time off—Usually Refused—Reasons for this—Employers not convinced of its benefits—It is considered unnecessary—Difficulties of granting it not realized—It is not always beneficial to the boys.

Forms taken by Time-Off—Two afternoons per week—More than employers are prepared to grant—Half an hour or an Hour before the ordinary time—Excusing from working overtime—The latter much more frequently granted and much more practicable.

The Boys—Enthusiastic Minority—The “Ins and Outs”—The Majority that fails to attend—The Sacrifices Involved—Difficulty of reaching the Schools—Influence of Overtime—The Arrangements of Ordinary Hours of Labour.

Are Hours such that boys cannot profit by attendance? Conflicting Opinions—Many foremen answer the question in the negative—The answer varies with length of hours and character of work—As regards a great many an affirmative reply is necessary.

Other Influences preventing attendance—Competition of Clubs, Brigades and Scouts—The Control they exercise—The Counter-Attractions of City Life—Natural Attitude and Instinct of a Boy of fourteen—The “Bread and Butter” view of Education.

Failure to keep up Attendance—Decreasing leakage among Older Boys—Long Summer Vacation—Failure to grasp instruction—Inability to find suitable Classes—Getting Tired of Attendance.

Problem to this extent rather that of keeping boys at School than of inducing them to go—Much has been done to promote “habit of attendance”—Future Requirements.

THE last chapter considered the general work and position of Trade and Technical Schools, and the present one is concerned with the provision of them in London, and the extent to which it is taken advantage of. It deals broadly with all forms of Continued Education, including the Manual Training that is given in the Elementary Schools themselves. Such teaching, therefore, may be divided into five classes—namely, Manual Training, Instruction with a Commercial or Industrial Bias in the Central Schools, Day Trade Instruction for those who have left School, but have not yet started in the workshop, the

ordinary Evening Continuation Schools, and Trade and Technical Schools proper.

Manual Training was started in 1888. During the first two years of the experiment there was no authority in the day schools' code for expenditure on this subject. The cost of conducting the work, therefore, could not be undertaken by the Education Authority and the necessary funds were provided by the Worshipful Company of Drapers and the City and Guilds of London Institute. In 1890 it was recognized as an elementary schools' subject, and passed to the control of the School Board for London, and when it was transferred to the Education Committee of the County Council by the Act of 1903,<sup>1</sup> a very large number of children were already receiving it. The work done consists almost entirely of woodwork, though there is a small amount of metalwork.<sup>2</sup> A number of Schools are grouped round a Centre, and each sends classes of its children to them on one morning or afternoon in each week. The number of available places is not yet sufficient to receive all who are qualified, but the deficiency is being steadily reduced.

At first all children who had reached the fifth standard, and all over twelve years of age in the lower ones were eligible to attend: but in 1907 a uniform age was fixed—eleven for the upper standards, and eleven-and-three-quarters for the lower. Thus the intention is that all pupils shall receive ultimately at least two years' instruction, whilst lighter manual work has also been introduced into the lower standards of the Elementary Schools themselves.

The development of Manual Training in the Elementary Schools, since it was taken over by the London County Council in 1904, is shown by the following table, from which it will be seen that the numbers receiving instruction have been largely increased and the deficiency of places as steadily diminished.

<sup>1</sup> 3 Edw. VII. c. 24, Education (London) Act, 1903.

<sup>2</sup> About 3,000 children receive instruction in this.

| Year ending on March 31. | Number of Centres. |               | Approximate Number of Boys on Roll. | Total Number of Boys eligible to Attend. | Proportion (per cent.) of (4) to (5). | Deficiency of Places. |
|--------------------------|--------------------|---------------|-------------------------------------|--|---------------------------------------|-----------------------|
|                          | Wood Working       | Metal Working |                                     |  |                                       |                       |
| (1)                      | (2)                | (3)           | (4)                                 | (5)                                      | (6)                                   | (7)                   |
| 1905                     | 192                | 8             | 61,500                              | 86,000                                   | 70                                    | 24,500                |
| 1906                     | 202                | 10            | 63,500                              | 85,000                                   | 74                                    | 21,500                |
| 1907                     | 204                | 10            | 65,000                              | 81,000                                   | 80                                    | 16,000                |
| 1908                     | 210                | 12            | 67,000                              | 81,000                                   | 82                                    | 14,000                |
| 1909                     | 216                | 12            | 69,000                              | 81,000                                   | 85                                    | 12,000                |
| 1910                     | 223                | 16            | 70,000                              | 81,000                                   | 86                                    | 11,000                |
| 1911                     | 231                | 17            | 71,000                              | 81,000                                   | 87                                    | 10,000                |
| 1912                     | 235                | 18            | 72,500                              | 81,000                                   | 89                                    | 8,500                 |
| 1913                     | 237                | 21            | 74,000                              | 81,000                                   | 91                                    | 7,000                 |

Much misunderstanding still exists on this subject. Manual Training does not profess to prepare boys for definite industries, still less does it pretend to teach a trade. It has two main objects. One of them may be called purely educational, and it is this one that is most insisted upon now. The result aimed at is to assist and further mental development by means of manual work, which is thus made to serve the same objects as the more purely literary subjects of the curriculum. "Learning by doing" it has been not inaptly described, and it thus seeks to increase knowledge and broaden the mind through the hand and eye.

Secondly, it is claimed that boys who have had the benefit of such Manual Training are likely to have improved chances of making their way in the workshop. These it will give them, not by fitting them for any one thing, but by giving a general training to the eye and hand, which will help them to fit themselves for anything. So, too, that broadening of the mind, which has just been mentioned as one of its educational results, has also its value industrially. For it will assist them to adapt themselves in later life to changes in industrial conditions. To do this a higher level of general rather than of special capacity is required, so that when one thing fails him a man can turn more

easily to something else. In this respect, however, Manual Training can do little more than pave the way for further work in Continuation Classes.

On the other hand, employers and foremen are almost unanimous in saying that this Manual Training gives little or no help in teaching any particular trade. A slight knowledge of tools and their uses is about the best that is credited to it, and generally the verdict is even less favourable. "Such training," one employer said, "ought only to teach boys how to handle the tools, and by professing to teach them to make things it does harm, by giving the boys inflated ideas of how much they know"; and a foreman said that the little it could teach would be very quickly picked up in the shop in any case. Others, again, regard it as valueless to "give them [the boys] a few tools and some small bits of wood to play about with," or point out that "the work is too small and the boys are helpless when they have to work on a broad plain surface," or say that "the boys learn a little at the Elementary School, but not much, because it all has to be unlearned." When, moreover, they get a wrong idea of their own capacity, and try to set up their knowledge against that of the foreman, it renders them positively less teachable than an absolutely raw boy, and consequently the latter is often preferred.

Admitting the seriousness of this last complaint, however, the answer to these strictures has already been given that Manual Instruction is not intended to equip boys for particular trades. It may be frankly admitted, indeed, that the danger of giving them a wrong idea of their capacity is a real one, and that in other respects improvement is still possible, but any such slight difficulties are more than compensated for by the benefits that have resulted from it.

It has also been attacked from another point of view as tending to cause too many boys to enter certain industries, some of which seem specially to attract them for other reasons, or on what may be called general social grounds. But less is now heard of this objection than formerly. Yet undoubtedly it has occasionally resulted in boys taking up

woodworking who might not otherwise have done so. But, so far as my experience goes, these are usually possessed of a real liking and capacity for it, and when this is so, Manual Training has had the entirely good result of causing the right sort of boy to enter the right sort of trade. Nor will this necessarily cause the latter to be overstocked. For if the number of vacancies is limited, these lads will simply obtain them in place of others who are probably less capable.<sup>1</sup> If, on the other hand, overstocking does result, this is less the fault of Manual Training, which provides a better class of boy, than of lack of proper organization in other directions. Secondly, the effect may be not to cause boys to enter a particular trade, but to prevent them from doing so. One result of the haphazard way in which employment is so often selected is that frequently after a year or two a lad finds himself unsuited to his work and has to find something else. Now in the case of woodwork two or three years of Manual Training at School will give him some idea as to whether he is fitted for it ; and, if he is not, will cause him to avoid it. Probably a more serious danger is that some, with real capacity for manual work, will be quite disheartened by its initial difficulties, and this is a further reason for giving a long spell of such instruction to every one.

When all due allowance is made, moreover, the assistance given by it in the choice of an occupation is one of its greatest merits, and it will probably play a considerable part in carrying out any comprehensive scheme of After-Care. For whilst it cannot test a boy's fitness for individual trades, it can show to which of the chief branches of employment, manual or clerical, he should go. In this matter mistakes are very often made, but Manual Training soon makes it clear whether "a chap is any good with the tools," and, if he is not, he quickly finds it out for himself. It may also do something to bring other latent capacities to light, especially in the case of drawing or design. Similarly, harm is often done when a boy of

<sup>1</sup> Or again, if the trade is largely recruited from outside London, the result may be to increase the proportion of London-bred workmen.

moderate ability attempts to enter a skilled trade, and only becomes an inferior mechanic—"a good labourer spoilt"—and here again his level of ability is likely to be disclosed in time. This Training, in short, helps to produce a preliminary classification of the boys, though as regards particular industries only woodworking and occasionally metalwork are directly affected, and in them the value of the actual teaching is not very great. Its real work, therefore, is to fit boys generally for industrial life, and to assist them to discover their right place in it.

During the last few years, moreover, a far more definite step in the direction of a general preparation for employment has been taken by the establishment of Central Schools by the London County Council, "with the view of giving suitable pupils a course of instruction with a definite bias towards some kind of industrial or commercial work!"<sup>1</sup> These are conducted under the Board of Education code of regulations for public elementary schools, but the curriculum is organized on the assumption that pupils will stay at school till between fifteen and sixteen years of age. Some of them are intended to prepare their pupils for business or clerical occupations, and give special attention to modern languages, book-keeping, shorthand, typewriting and commercial correspondence; others to fit them for industrial employment, and in them importance is attached to science, drawing, handicraft (for boys) and domestic economy (for girls); and a certain number take pupils of both classes. The three types of School are said to have a commercial, an industrial, and a dual, bias respectively. The curriculum of each type has to satisfy a certain minimum of requirements, but otherwise may be varied according to the needs of different districts. In all the establishment of sixty of these schools has been approved by the Council, and at the end of January, 1914, forty-eight of them were in existence.

Entry into a Central School is at the beginning of each educational year (April) and to be eligible for admission,

<sup>1</sup> *Handbook Explanatory of the Duties of the Special Selection Committees appointed in Respect of the Central Schools.*

a boy or girl must be less than twelve, and not less than eleven, on the following July 31, and must have reached a class corresponding to Standard V or a higher one. Normally, therefore, pupils will be between ten years and eight months, and eleven years and eight months at the time of admission, though certain exceptions are allowed. The Schools are organized on the basis of a four years' course, the parents undertaking that their children shall remain at school till between fifteen and sixteen. To meet the difficulty of keeping them there after the age of fourteen, however, the Council is awarding a limited number of junior county exhibitions to those in attendance at a Central School as from the time they attain fourteen years of age.

The selection of pupils is in the hands of special Committees and will be determined by a number of considerations—namely, the recommendations of head teachers and district inspectors, the percentages of marks obtained by children at the previous terminal examination, the results of junior county scholarship examinations, the probability of the children remaining at school long enough to justify the change, and, in the case of Schools with an industrial bias, specimen drawings and other evidence of manual dexterity. Special importance is attached to the latter, and the Council has determined that—

“A lower percentage of marks may be accepted in respect of pupils who show exceptional ability in drawing or unusual dexterity in handicraft, provided that the general education is such as to enable them to profit by the instruction given in the Central School.”<sup>1</sup>

The Central School thus gives “an educational course not provided in the public elementary graded schools or in the secondary schools.”<sup>2</sup> In each type it seeks to give definite preparation for one of the two main branches of employment, manual and clerical, and in each case a certain proportion of the week has to be devoted to definite occupational teaching. Thus throughout the course schools with

<sup>1</sup> London County Council : *Explanatory Handbook*, p. 7.

<sup>2</sup> *Ibid.*, Appendix II, p. 20, quoting from Chapter XV of the *Elementary Schools Handbook*.

an industrial bias are to give not less than ten nor more than twelve hours a week to practical work, consisting, in the case of boys, of science (including mensuration), drawing, clay-modelling, wood and metalwork, and, in special cases, leather-work and printing and other approved subjects.<sup>1</sup> The attempt is thus made to give a general preparation either for industrial or commercial employment, but without an attempt, such as is made in the Day Trade Schools, to give a preliminary training in particular trades. Thus the County Council claim

“The chief objective is to prepare boys and girls for immediate employment on leaving school, and the instruction should therefore be such that children will be prepared to go into business houses or workshops at the completion of the course without any intermediate special training.”<sup>2</sup>

These Schools, therefore, are intended to provide for the abler boys and girls something better than the ordinary elementary school can give them, ability being interpreted in a wide sense. Thus only those who have reached a certain standard of attainment are eligible, and from among these the selection is made. Further, such provision for the abler children will do much to make the best of their talents, and it is rendered all the more necessary by the fact that employers do not in many cases engage them for their better posts till fifteen or sixteen years of age. The Central Schools thus enable them to prepare for this time and to avoid the dangers of the intervening period.

When we come to the Day Trade Schools we find definite efforts being made, and with growing success, to provide preparation and a definite preliminary training for particular trades. The number of schools which take their boys for this purpose at thirteen or fourteen—that is, at, or a little before, the time at which they would normally leave School—and keep them to the age of sixteen or seventeen, is being steadily increased. Moreover one or two industries, notably Engineering, are demanding boys who have already received two years' Technical Training, and in them the policy of not taking learners before the age of sixteen is

<sup>1</sup> *Explanatory Handbook*, p. 22.

<sup>2</sup> *Ibid.*, p. 20.

particularly common. In Building again, where far fewer are taken, some of the bigger firms do not start them before they are fifteen or sixteen, and they are stated to "come usually from a class who do keep, and can afford to keep, their sons at school till this age." Many of them, indeed, both in Building and Engineering, are destined to fill higher positions than that of the mechanic.

The Day Trades Schools proper combine this preparation of boys or girls for particular groups of trades with an extension and improvement of their general education. Their pupils consist partly of those who have obtained Scholarships carrying with them a maintenance grant and partly of others whose parents can afford to keep them at school without assistance and pay a fee for their attendance. This side of the work of the County Council has developed rapidly during the past few years. Thus in a report presented to the Education Committee on February 24, 1909, the following statement was made—

"The total number of trade scholarships for boys is 142, of which thirty are not yet awarded, although authorized. (The age at which pupils are admitted is given in brackets against the name of each school) :

| School.                                      | Trade.             | Number of Pupils. |           |                 |        |
|--|--------------------|-------------------|-----------|-----------------|--------|
|  |                    | 1st Year.         | 2nd Year. | 3rd Year.       | Total. |
| Borough Polytechnic (12 and over)            | General . .        | 52                | 71        | 47 <sup>1</sup> | 170    |
| Central School of Arts and Crafts (14-16)    | Silversmithing     | 9                 | 11        | 4               | 24     |
| Paddington Technical Institute (14-16)       | Engineering .      | 22                | 16        | —               | 38     |
| School of Building (13-16)                   | Building . .       | 40                | —         | —               | 40     |
| School of Engineering and Navigation (13-14) | Engineering .      | 41                | 16        | —               | 57     |
| Shoreditch Technical Institute (13-16)       | Cabinet-Making . . | 40                | 30        | 35 <sup>2</sup> | 105    |
|  | Total . .          | 204               | 144       | 86              | 434    |

<sup>1</sup> Including five 4th year pupils.    <sup>2</sup> Including fourteen 4th year pupils.

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This development has been continued since the date of this report, and instruction under similar conditions is also given at other institutions such as the Northampton Institute.

The above does not, however, exhaust the number of those who are receiving some form of day trade instruction. In the thirteen Institutions maintained by the County Council alone the numbers of students of both sexes and of all classes were as follows:—

| Session<br>September 1<br>to March 31<br>or February 28. <sup>1</sup> | Day Students.       |           |   | Increase. | Percentage<br>(3) of (2). |
|---|---------------------|-----------|---|-----------|---------------------------|
|   | Number<br>enrolled. | Increase. | Numbers<br>making at<br>least one<br>attendance<br>in March or<br>February. |           |                           |
| (1)   | (2)                 |           | (3)   |           | (4)                       |
| 1904-5  | 878                 | —         | 680   | —         | 77                        |
| 1905-6  | 1,109               | +231      | 847   | +167      | 76                        |
| 1906-7  | 1,456               | +347      | 1,109   | +262      | 76                        |
| 1907-8  | 1,702               | +247      | 1,337   | +228      | 79                        |
| 1908-9  | 2,057               | +355      | 1,593   | +256      | 77                        |
| 1909-10   | 2,283               | +226      | 1,966   | +373      | 86                        |
| 1910-11   | 2,673               | +390      | 2,203   | +237      | 82                        |
| 1911-12   | 2,722               | + 49      | 2,272   | + 69      | 83                        |
| 1912-13   | 2,884               | +162      | 2,387   | +115      | 83                        |

These figures, however, cover all day students, and include those in art and domestic economy. Many of them are only attending particular classes for two or three hours a week. In the Day Trade Schools proper they give their whole time during a course, usually of three or four years, though in one, the School for Waiters, it lasts for one only.

Entrance into them is secured either by passing a qualifying examination or by obtaining a scholarship, the former providing for those whose parents can keep them at school till sixteen without assistance,

<sup>1</sup> The returns covered the period to the end of March and attendance during March from 1904-5 to 1908-9 inclusive, and the period to the end of, and attendance during, February subsequently.

and the latter for those who must have help. Literary education and trade teaching are combined in different proportions during each year, the former occupying a larger part of the time in the first than in the second or third. It is given, however, with special reference to the needs of the workshop and particularly of the industries concerned. Thus, drawing, and design are so taught and arithmetic takes the form of workshop arithmetic. Secondly, the trade teaching is based on a group of trades, the boy on entry having to declare his intention to enter one of them, but not as a rule selecting that one until later.<sup>1</sup> For two years he is instructed generally in the principles, methods and tools appropriate to the whole group and only specializes in the third.

The Day Trade School has, therefore, several objects. It seeks to give a wider outlook and greater adaptability to the changing conditions of industry than can be derived from learning in a single firm. Within the trade group with which it deals, it strives to apply the principle of selection more carefully and to fit each boy to the exact position for which he is best suited. Moreover, by compelling him to declare his intention to enter such an industry, it does something to ensure that the students shall be those who would have entered it in any case. Thirdly, not merely does it aim at putting children of the well-to-do working classes into good positions, but it seeks by means of its system of Scholarships to do the same thing for the able children of poor parents, thus rendering possible a wider range of choice in filling the better positions. In this way it provides a superior form of education for those who must enter the higher ranks of industry, if they are to do so at all, by way of the workman's bench, and gives them also a better start in life than they would otherwise be likely to obtain.

Thus the Schools do not, as a rule, limit themselves to

<sup>1</sup> E.g., at the Shoreditch Technical Institute, the wood-working and allied trades—Cabinet Making, Carpentering, Carving, Coach and Van Building, Coopering, Upholstery, and so on.

teaching the elements of manual work. They do teach this, but usually with the hope that their students will eventually go further. "We seek to bring on boys," one of their Principals said, "not as ordinary mechanics, but to rise higher than this." Now the broader and more general education, the more complete knowledge of the rudiments of a trade, and, above all, the early habituation to attendance at Technical Classes, not only give a better start in learning the actual work than the average boy gets, but often inculcate better industrial habits and more favourable methods of working. The students of the Trade School possess, as a rule, an advantage in capacity, and add to it the further superiority given by a training that is peculiarly suited to their purpose. Moreover, as one foreman insisted, it is not so much the best craftsman who rises to fill the higher posts, but the man who has the best grasp of an industry in all its bearings—commercial, practical, and scientific—and in this respect these students get a considerable initial advantage.

Nor must their advantages in learning the manual work be forgotten. In the shops many boys can only get labouring jobs for the first two years after they leave the Elementary School. Others, where there is no contract, are either overspecialized or allowed to run wild. The Trade School, on the other hand, substitutes two or three years of careful preliminary training under definite and adequate supervision, which often renders possible a higher level of craftsmanship later on, and this fact employers are beginning to appreciate. Finally, at fourteen the boy has to fight his battles alone, ignorant, ill-equipped and often unguided, knowing neither what he wants nor how to set about getting it. At sixteen or seventeen, after his two or three years' course, he at least knows not only what he wants but what he ought to avoid. Better able to look after himself, he is better looked after, and possesses sufficient knowledge to make him of some value to an employer.

Criticisms emanate from various quarters. It used to be urged against the Schools by some Trade Union officials

that they produced a surplus of cheap half-taught labour, which could be used to cut wage rates ; but far less is now heard of this complaint. In view, moreover, of the small number taken, of the care exercised in selecting boys who would have entered the industries concerned in any case, and of the thought devoted to finding good openings for them, this contention is scarcely tenable. Sometimes, again, it is argued that certain trades are overstocked, and that additional boys should not enter them. Against this it can be urged that it is the mode of entry rather than the number who enter that is affected by the Schools, and that by entering in this way boys have often a better chance of full employment later on than they otherwise would have done. Above all it is unfair to deprive the abler children of the present generation of their chances in those industries which, if temporarily overstocked, are likely to provide full employment again in the future.

Speaking from a somewhat different standpoint, many employers and foremen maintain that the work is unpractical and that it unfits boys for the workshop, and not a few of them insist on getting their learners direct from the Elementary School. Certainly the methods of some Day Trade Schools have not always been sufficiently adapted to the needs of the workshop, nor even now is the danger entirely an imaginary one, and undoubtedly some of their boys, when they start at the bench, presume too much on what they have learnt at them.

Nevertheless the Schools are living down the prejudices of the past and are even creating a demand for their pupils. "Twenty good firms send to us when they want a boy"—"Only one of the boys who have passed through the School is out of a job and this entirely his own fault"—"Once you can get an employer to take one boy he often comes for another," are among their more favourable experiences ; and some firms refuse to engage their students simply because they have methods of getting learners as, for instance, from among their workmen's sons, which prove satisfactory and provide as many as they require. On the other

hand, there is a definite demand in some trades for those who have had this preliminary training. The case of Engineering has already been mentioned, and in Silver-smithing and other Art Metal Work the value of the materials causes employers to prefer those who have had "the rough edges knocked off them" and know a little about the tools and processes. The Schools, moreover, are still in their infancy. They have corrected many of their initial mistakes, and are beginning to gain the support of employers, though they have still ample scope for greater development in the future.

Continued Education has already been described as falling into two parts—Ordinary Evening Continuation Schools, which aim either at extending and developing general education or at preparing for commercial employments—and Trade and Technical Schools. For the year ending July 31, 1912,<sup>1</sup> the Board of Education returned the students enrolled in evening schools of any kind in the County of London as 96,247 men and boys and 80,965 women and girls, of whom 70,508 and 56,744 respectively qualified for the grant; that is to say, made a minimum attendance of fourteen hours during the session.

No separate return is made for London of the number of classes in different subjects, but in the whole of England and Wales, well over 80,000<sup>2</sup> were held in that year. Of these nearly one quarter gave literary,<sup>3</sup> and over one-fifth commercial, instruction.<sup>4</sup> Those bearing upon crafts and industries<sup>5</sup> were less than one-fifth of the whole, and in addition to them some of the 5,665 science classes are used for acquiring technical knowledge.

<sup>1</sup> *Statistics of Public Education in England and Wales*, Part I, Educational Statistics, 1911-12 Cd. 6964.

<sup>2</sup> For detailed figures see Appendix.

<sup>3</sup> Including classes in Pure Mathematics, but not those in Practical Mathematics.

<sup>4</sup> Including Commercial Subjects (13,220) and Commercial Arithmetic (2,381).

<sup>5</sup> Industrial Subjects (7,413) Industrial Arithmetic (4,857), and Manual Instruction (1,749).

Altogether of the 96,247 male students in London, 55,344 were under twenty years of age ; and of the total number less than three-quarters attained even the necessary modicum of regularity to qualify for the Board of Education grant. No separate returns of those earning grants at different ages are given for this year, but those made in 1909 showed that the proportions were considerably higher in the case of men over twenty than in that of youths and boys. Now the recent Census gave the number of occupied males between fourteen and twenty in the County of London as 196,660. Thus those who make any attendance at all are about two in seven, and those who get any serious amount of continued education in any one year not much more than one in five. Probably the real proportions are even smaller, since some of the students live outside the county boundaries.

There are no means of estimating them in different branches of work. Probably they are somewhat more favourable in clerical employments and in the more highly skilled trades, whilst few low-skilled workers appear to use the Schools. The matter was dealt with in a paper read before the Imperial Education Conference of 1911 by Sir Robert Blair, Education Officer of the London County Council, and from the figures given by him it appears certain that in a few cases, notably with engineers' fitters and turners, and in the photographic trades, the majority of the learners utilize the classes, whilst in some others, such as brick-laying, pianoforte-making, and the manufacture of leather, only a very small proportion do so. On the whole, however, the proportion of those who are receiving some form of continued education is probably somewhat larger in the case of learners in skilled trades than in that of all workers.

The age distribution of male students under twenty in the County of London during the year 1911-12 and of all occupied males below this age at the Census of 1911 is given in the following table :—

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| Ages.          | Male Students.<br>(Educational<br>Statistics year<br>ending July 31, 1912). | All Occupied.<br>(Census of 1911). | Percentage<br>of<br>Occupied. |
|----------------|---|------------------------------------|-------------------------------|
| Under 14 . . . | 1,082   | 2,878                              | 38                            |
| 14-15 . . .    | 12,586  | 21,366                             | 59                            |
| 15-16 . . .    | 11,208  | 31,935                             | 35                            |
| 16-17 . . .    | 10,230  | 34,525                             | 30                            |
| 17-18 . . .    | 8,267   | 35,534                             | 23                            |
| 18-19 . . .    | 7,167   | 36,509                             | 20                            |
| 19-20 . . .    | 5,886   | 36,771                             | 16                            |
| Total . . .    | 56,426  | 199,518                            | 28                            |

Thus whilst between fourteen and fifteen nearly three-fifths of all the boys at work made some sort of attendance, the proportion had dropped to a little over one-third in the following year and then fell steadily till it was barely one-sixth between nineteen and twenty. As some consolation for this, the regularity of attendance shows decided improvement at the later ages. Hence the latest return<sup>1</sup> we possess of those qualifying for grant returns a little over one-half as having done so between fourteen and fifteen, nearly two-thirds between fifteen and sixteen and not very far off three-quarters between nineteen and twenty.

The fact that so many juvenile workers receive no continued education at all or at best the merest smattering of it promises to prove one of the most serious difficulties in the way of establishing universal and compulsory Continuation Schools. For to do this involves extending attendance from the enthusiastic minority to the far larger majority who are indifferent or hostile. On the other hand, trouble at present arises not so much in securing attendance in the first place, as in inducing the children to keep it up, and probably this is largely due to the voluntary system. One

<sup>1</sup> Unfortunately separate figures for those earning grants at each year of age have not been given since the volume of *Statistics of Public Education for 1908-9*. See Appendix V. The proportion of the whole number who qualified for grant was considerably higher in 1911-12 than in 1908-9.

may hope, therefore, that, once it is made compulsory, such attendance will soon be taken as a matter of course, and that it will grow into a habit, which in many cases will continue after the close of the period of compulsion.

This will be the most convenient point at which to consider the re-organization of its Evening Schools<sup>1</sup> which was sanctioned by the County Council in June, 1913, and brought into force in September of that year. By this numerous changes were introduced, including large modifications and improvements in the position of the teachers. Perhaps the most important of those affecting the attendance and instruction of the pupils are connected with the re-grading of the different Institutes, by which name the various schools and centres are for the future to be known, and with making the course system compulsory in many of them.

The former has resulted in the following classification :—

- I. *Polytechnics, Technical Institutes and Schools of Art* providing for all advanced technical students, their number for the time being remaining unchanged.
- II. 22<sup>2</sup> *Junior Technical Institutes* closely linked with them and giving (1) the rudiments of technical education for those who want no more, and (2) a preparation for young students who propose to attend the higher institutions later on.
- III. 30 *Commercial Institutes*, estimated to have some 30,000 students in attendance, providing advanced commercial education for young men and women.
- IV. 50<sup>2</sup> *Junior Commercial Institutes* for those seeking elementary commercial instruction at some school easily accessible to them. Where necessary preparatory courses will be provided.
- V. 30<sup>2</sup> *Women's Institutes* dealing with domestic subjects, health, and needlework and providing teaching in non-vocational subjects. Special women's insti-

<sup>1</sup> See the Minutes of the Meeting of the London County Council on June 3, 1913, and that of the Education Committee on May 7, for a detailed account of the scheme.

<sup>2</sup> Approximate numbers.

tutes will also be developed in connexion with the three Girls' Trade Schools.

- VI. 25<sup>1</sup> *Institutes with more than one department* in districts which are not large enough nor sufficiently well defined to demand one or more schools with a single objective. Such may combine the functions of, for instance, junior technical and commercial, or of junior commercial and women's institutes, and so on.
- VII. *General Institutes not to exceed 40*, to provide for all classes of students. Upon these only the minimum of restriction will be placed as regards age and curriculum.
- VIII. 25<sup>1</sup> *Free Institutes*, giving a general but not a commercial education.
- IX. 11<sup>1</sup> *Schools for the Deaf*, which will be continued as at present.
- X. 12 *Institutes giving instruction in non-vocational subjects*, confined to students over eighteen years of age.
- XI. *Post Office and Police Classes and those held in business houses or clubs* will remain undisturbed for the present.

The Junior Institutes are to be closely linked up with the corresponding Higher Institutes and will in fact form branches of them; and it is hoped to keep the connexion between them clearly before the younger students by arranging for periodical visits of their classes to the latter, and thus to assist and encourage their transfer to them at the proper time. This re-organization further provides as far as possible separate Institutes for the different grades of students, Commercial and Junior Commercial for clerical workers, Technical and Junior Technical for the artisans and higher ranks of semi-skilled, and Free and General Institutes, both for the low-skilled and for some of the others. The Preliminary Courses will also provide for those who have difficulty in grasping or assimilating the teaching,

<sup>1</sup> Approximate numbers.

either because of defective elementary education or because they have been absent from school for some time and forgotten much of what they learnt there.

No higher institution of any kind, commercial or technical, will admit any student unless he is seventeen years of age, *or* has attended a central or secondary school for not less than three years, *or* has completed a course at a Trade School, *or* produces a certificate of having satisfactorily attended a two years' course of study at a junior institute of the same type, *or* satisfies a test of fitness to take full advantage of the education offered. On the other hand, no Junior Institute shall admit or retain pupils who have fulfilled the two years' course just mentioned, or who are over eighteen years of age on August 1 of the year in which the evening school session opens. The overlapping year is intentional. Such a scheme, therefore, is a long step in the direction of properly adapting the teaching to the ages of the students and confining them in their earlier years to preparatory courses or general instruction which will lead up to the higher branches of knowledge later on.

Finally the new organization insists strongly upon the course system and largely bases itself upon it. Courses are obligatory on all pupils under eighteen in Junior Commercial and Technical Institutes and on those who are taking commercial and technical subjects in General Institutes.

"The courses (two hours each night) would, in the main, be for three nights' instruction, one night being devoted to tutorial work, some preparation or home work, and some light physical education, and possibly some music or drawing, the fee for a single subject to be not less than the fee for the course. There should be a variety of courses suitable for those engaged in selling and distribution as well as for those engaged in the counting house or workshop. The courses would, where necessary, include preparatory courses in English, arithmetic, drawing and light physical education. . . . When the student has not been in the seventh standard of an elementary school, or class of similar standard, or where, having been in such class, he has been absent from school for over a year, he must join the preparatory course or submit to a test by a responsible teacher. . . . A student under eighteen years of age, who fails to make satisfactory attendance

in any one subject of the course, except in the case of a non-vocational subject, and who cannot produce reasonable grounds for absence, should forfeit his fees and be excluded from the institute."<sup>1</sup>

Certificates are also to be granted to those students who satisfactorily attend a full course. Such, however, will not be obligatory in the case of Free Institutes, and as already stated a two years' course at any Junior Institute is one of the conditions of admission to a higher one before the age of seventeen.

Such are the main outlines of the new scheme. In addition to them, the fees have been raised, but the number of exemptions from payment increased. Special efforts are to be made to enlist the sympathies and support of employers, and the Managers of Evening Schools are to be replaced by Advisory Committees, who will carry on with important extensions the After-care work of the Care Committees of Elementary Schools.

So far as a voluntary system can do so, the plan, though not perfect, goes far to provide for the chief requirements of the situation ; but it has not yet reached its final form. Perhaps three of its changes are most important. One is the organization of different classes of Institutes to suit the needs of each grade of worker. Secondly, the provision of different forms of teaching for younger and older students makes it possible to compel them to take the kind of instruction adapted to their age and experience, and to prevent them from attempting more advanced subjects without the necessary preliminary equipment. Previously such an arrangement had proved difficult to secure. Thirdly, insistence upon the course system will do much to overcome the difficulty that has hitherto arisen from the refusal of boys to take up anything that does not bear directly on their work ; for it makes the study of those subjects, whose value they do not see, a necessary condition of obtaining instruction in others to whose utility they are alive. Indeed,

<sup>1</sup> Minutes of the Meeting of the Education Committee of the Council on May 7, 1913, p. 887.

this last may prove to be the most far-reaching change of all.

These improvements, however, have not been carried out without some loss in other directions, and this indeed is inevitable under the present voluntary arrangement. Thus the first year's working has shown a decline of 20 per cent. in the number of students, and so far there has been only a slight increase in regularity of attendance of those who remain. Such, indeed, was inevitable and the course system alone is no doubt responsible for a good many losses. But there is no reason to fear that a recovery will not take place as soon as the scheme gets better known and understood. Generally speaking, it is too early to pronounce a definite judgment on its prospects or on the support it will gain from employers and others: but it seems to be well conceived and to hold out great possibilities of ultimate success.

Finally it is necessary to consider the smaller number of schools or institutes which are engaged in the provision of Technical Education. This was described in the last chapter as being made up of two branches—technical teaching proper in the form of the scientific and other purely technical knowledge bearing on different industries, and trade teaching of the manual work. Intermediate between the two of them is the Higher Trade Teaching of the theory and general principles of an employment.

The Polytechnics and Aided Institutions of the Council are mainly occupied in giving either technical teaching proper or higher trade teaching, though one or two of them are really Trade Schools.<sup>1</sup> The thirteen Maintained Institutes, however, are engaged primarily in giving trade teaching proper, together with such theoretical and scientific knowledge as is necessary to accomplish their main objects. Their growth, therefore, as displayed in the following table, may be taken to illustrate that of trade teaching generally in London:—

<sup>1</sup> Throughout the rest of the chapter the term Trade School will be used to denote those institutions whose primary object is the giving of trade teaching.

## LONDON COUNTY COUNCIL—MAINTAINED INSTITUTIONS.

| Session.<br>September 1<br>to end of<br>March or<br>February. <sup>1</sup> | Numbers<br>enrolled<br>to end of<br>March or<br>February. <sup>3</sup> | Increase<br>on<br>Previous<br>year. | Number<br>making at<br>least one<br>attendance<br>in March or<br>February. <sup>3</sup> | Increase<br>(+) or<br>Decrease<br>(—) on<br>previous<br>year. | Percentage<br>of figures in<br>Column 4<br>to those in<br>Column 2. |
|--|--|-------------------------------------|---|---|---|
| (1)  | (2)  | (3)                                 | (4)   | (5)   | (6)   |
| 1904-5   | 5,097  | —                                   | 3,103   | —   | 60.9  |
| 1905-6   | 5,859  | +762                                | 3,954   | +851  | 67.5  |
| 1906-7   | 6,215  | +356                                | 4,152   | +198  | 66.8  |
| 1907-8   | 6,527  | +312                                | 4,436   | +284  | 68.0  |
| 1908-9   | 7,518  | +991                                | 4,977   | +541  | 66.2  |
| 1909-10 <sup>1</sup>   | 8,425  | +907                                | 6,233   | +1,256  | 74.0  |
| 1910-11 <sup>1</sup>   | 8,684  | +259                                | 6,241   | + 8   | 71.9  |
| 1911-12 <sup>1</sup>   | 8,807  | +123                                | 6,198   | — 43  | 70.4  |
| 1912-13 <sup>1</sup>   | 9,299  | +492                                | 6,445   | +247  | 69.3  |

This shows in less than ten years a very satisfactory improvement of over 4,000 in the numbers enrolled and of over 3,000 in attendance of some sort throughout the session, and those who kept it up also increased from just over sixty to nearly seventy per cent. of the total number. It should be remembered, however, that these schools are not confined to trade teaching, but have art, science and domestic economy classes. The latter train women and girls for home duties, and their rapid development has no doubt accounted for a good part of the increase. Similarly the art students are not usually artisans, but are differently engaged and have different objects. Still even so the returns give evidence of a satisfactory increase both in the numbers and attendance of the latter.

Like other branches of continued education, therefore, the Evening Trade Schools have made considerable progress, but as yet they do not nearly cover the whole ground nor reach more than a minority of the boys. There are many

<sup>1</sup> In 1909-10 and the following years the returns are made to the end of February, and previously to the end of March. The result is slightly to exaggerate the increases between 1908-9 and 1909-10.

whose attendance is spasmodic and short-lived, and more who do not attend at all, and it is just these last who often require them most. On the other hand, the minority of regular students is a growing and enthusiastic one. The success which the Schools have achieved has only been attained after considerable effort, and they owe very much to the energy and keenness both of present and past members, whilst happily an increasing number of employers are now encouraging their boys to make use of them.

Nevertheless their progress is at least steady, if not as rapid as might be wished, and both employers and boys are being made to realize their character, and are being gradually convinced of their merits. In time it may become the normal and natural thing for the latter to attend them, but that is not so as yet. At the same time the work already done has probably gone deeper than appears on the surface, because at first so much of it must consist of removing obstacles and objections.

The Trade Schools have also had to buy their experience and to learn from their mistakes. This is necessarily a slow process, but the "habit" of attendance is nevertheless being slowly created and the creation of "habit" is one of the roots of all real progress. Thus in one district attendance at a School of Engineering and Navigation was coming to be regarded as "rather a smart thing"; whilst it is not unusual for one boy to get another to "come along with me." Now the growth of such a public opinion among the boys themselves will in time be of enormous value to the Schools, and though such a public opinion is still in its infancy, sufficient progress has been made as to give considerable promise for the future.

The information given to me by those whom I interviewed as to how and why they came to attend a Trade School is of some interest in throwing light upon the present situation. Exclusive of seven who were sent under special arrangements by a single firm, I obtained answers from seventy-four individuals, and the causes of their attendance may be classified as follows:—

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|   |    |
|---|----|
| Sent by Relatives . . . . .   | 23 |
| (Fathers 15, five being employers; Brothers 6, two being employers).              |    |
| Sent by other Employers and by Foremen . . . . .                                  | 11 |
| Through shopmates and other friends . . . . .                                     | 14 |
| By Apprenticing Agencies . . . . .  | 6  |
| Attended Day Trade Schools . . . . .  | 6  |
| Other School Influences . . . . .   | 6  |
| Accidental (Obtaining leaflets or circulars, hearing casual talk, etc.) . . . . . | 8  |
| —   |    |
|   | 74 |

Of the relatives and friends mentioned above only a very few held official positions in the Schools, but four out of six brothers, two of the fathers and some of the friends had themselves received benefit from such instruction in the past or were still receiving it, and as a result were trying to induce others to take advantage of it. Similarly a young foreman, whom I saw elsewhere, told me: "I got so much good out of them myself that I always try to persuade others to go in order that they may get the benefit too."

Two points stand out saliently. First, under a voluntary system much must depend on the will and power of present students and of employers and foremen thus to interest others to attend; and this, in turn, will vary with the capacity of the Schools to provide the sort of instruction that is required. It is a pleasing sign, therefore, that so many boys are keen to do this; for valuable as may be the influence of others, theirs is the most valuable of all. One boy appeals most strongly to another, and his advice is often more readily taken than that of foremen or "guv'nors," since the latter may be thought to have objects of their own to serve. Nevertheless their sympathy and encouragement are of great importance; and their assistance is not confined to the giving of time off and other facilities, but arises even more definitely from putting clearly before the lads the need and advantages of attendance, and from convincing them that it is the right and proper thing to do. This support is not so general as could be wished, partly as a result of the early

mistakes of the Schools themselves. At the same time it is certainly growing.

The second point of importance is the part that can be played by various agencies, voluntary or official. Day Trade Schools not only teach boys to rely on trade classes, but to know also what it is that they can give, and similar influence is sometimes brought to bear by ordinary Continuation Classes and by Manual Training at the Elementary Schools. The latter perhaps interests particularly the keener boys and those who are good at manual work. Now this interest and the influence of instructors causes them to take with them, when they leave, the determination to join a Trade Class, and so forms the bridge to carry them over from the one to the other.

Apprenticeship Associations and similar bodies not only exert a steady and continuous pressure in this direction, but do something to secure facilities from the employers ; and of all their work this is perhaps least open to criticism. Their weakness lies in the fact that they reach only a very small number, and the value of what they do consists less in their actual achievements than in preparing the way for a more general organization of boy labour. This, indeed, is already growing up in the establishment and mutual co-operation of Juvenile Labour Exchanges and Care Committees, who will in time come to do for all boys what these Associations are doing for a few ; and experience too gives reason to hope that the wider system, absorbing and strengthened by the personnel of these smaller bodies, will steadily extend its influence.

The present position of Trade and Technical Schools, that of the former more particularly, can now be shown by a brief consideration of the attitude towards them of the parties concerned. For in its growth every social institution or movement passes through a number of stages. The first is that of public ignorance, when it neither enjoys support nor suffers from opposition, simply because its existence is scarcely realized, much less reasoned about. The next step forward is when prejudice, passive opposition, or even

active hostility are aroused, and a very salutary change this often is. It leads outsiders to inquire into the merits of the institution concerned, and condemnation, not always undeserved, leads to inquiry from within to set right errors and mistakes and to adapt it more fully to meet the needs it sets out to serve. This has been abundantly true of the Trade Schools, and as a result of criticism the faults of their earlier teaching have been largely removed.

The third stage is one of passive acquiescence and support ; and it is this point that the great body of employers and foremen have now reached. Active opposition has ceased, and often the use of the Schools is recommended to the boys. But only a minority have as yet advanced to the fourth stage of active support and the provision of facilities for attendance, though in a few trades, notably Engineering and Printing, a very fair proportion have done so. The last stage is covered when Compulsory Evening Schools, with a corresponding reduction in the hours of Juvenile Labour, are "accepted" willingly "as an integral part of the industrial system." It has already been reached in parts of Germany, notably in Berlin, Frankfurt, Leipzig and Munich. In England, however, progress from the third stage to the fourth is only beginning.

Root and branch opposition is found among a minority of employers in many trades. It comes either from inferior firms, or from others who believe that they can "teach all there is to be taught better than Schools can," or who have had an unfortunate experience of their work in the past. Often no action is taken one way or the other. Sometimes there is no suitable School available. At others the employers consider they have no right to bring pressure on the boys. "We do not interfere: we have no right to any control over what a boy does in his own time." Or, again, interference is considered inadvisable, because a boy must go of his own free will or not at all: and some "won't be troubled" or "do not concern themselves with what he does in his own time."

In very many cases, however, an effort is made to influence

learners, if only to the extent of bringing the Schools to their notice ; and usually something is done to encourage them to attend. Some employers merely point out the advantage they offer, others exert every influence short of actual compulsion, and a few even impress on their boys that their chance of rising or of keeping their places depends upon attendance at them. " We insist," I was told by one large employer, " that if we are to look after a boy and teach him during the day, he must go and learn for himself at a Technical School in the evening. The boy who will not look after himself in this way is of no use to us."

The success achieved varies from firms which with all their efforts can induce few to go, to others which secure their attendance almost without exception. The difference is partly to be accounted for by the more obvious need for technical training in some trades than in others. Again, a special connexion between the firm and the School, as when an employer is a member of the Council or a foreman of the teaching staff, has also some effect. More depends, however, on the way in which boys are approached. When this is done in a haphazard manner or left to the foreman, the result is not likely to be very favourable. Where it is done carefully and systematically, it is often a great success. Thus one employer said : " We talk well to each boy and show him the need of using the Technical Schools, and this so stimulates their interest that even if they do not go at once, they soon follow their companions there."

Actual compulsion, indeed, is generally regarded as bad policy and often influence and persuasion, properly exercised, will do all that is necessary or possible. In other places advances in wages are sometimes made to depend on attendance and progress at the classes, and in London also something might be done in this way. There, however, the employers prefer to base increases, over and above any agreed rate, upon general improvement and capacity and not upon work at a Trade School only ; but where, as sometimes happens, a boy is told clearly that the latter will " help him to get on," the effect is likely to be much the

same. A few firms also pay the fees for their boys ; but this is not very often done.

Least success, as nearly all who have dealt with the matter will agree, has been achieved in securing from employers " time off " for attendance. For their refusal to grant this there are many legitimate reasons, and these will have to be fairly met. The idea is still a new one, and many, even of those who regard the Schools as useful adjuncts to the workshop, are not yet convinced of the benefit of granting it, especially where as much as two afternoons or half-days a week are asked for. Many also honestly believe that during the daytime a boy is better employed in the shop than in a School. Here, therefore, the Schools have to show that they can provide something that will make it worth an employer's while to incur the trouble and inconvenience involved, and the more rapidly they can bring themselves into line with the requirements of different industries, and the better they can adapt themselves to the convenience of the masters,<sup>1</sup> the greater will be their progress. Nothing but harm can come from the habit of a certain type of person of continually grouching and nagging at those of the latter who fail to see eye to eye with him.

Secondly, the opinion is widespread among employers that time-off is unnecessary and that the boys have sufficient time and energy for the purpose after the day's work is over, and foremen are as a rule even more emphatic on this point. Sometimes, however, exceptions are made for special reasons or special occasions or in favour of those whose homes are a long way from the workshop.

In some of the chief industries, too, hours are such as to minimize the difficulties of attendance. In Building they are only forty-four a week in the winter months, and fifty during the rest of the year. In Engineering and the better-class

<sup>1</sup> This is already done in some cases. Thus at a certain Class connected with Art Metal Work the boys left their shops at 5 p.m. instead of 7 p.m., and the Class was held from 5.30 p.m. to 7.30 p.m. Thus the latter was held almost entirely during working hours, but in such a way as to cause the minimum of inconvenience to the employer.

Furniture Trade they are from fifty to fifty-two and a half throughout, work stopping at 5.30 or 6 p.m., as against 4.30 or 5 p.m. in the Building Trades. In Printing, Art Metal, wholesale Cabinet-Making and some of the Metal Trades it goes on till 7 p.m. or later ; and hours, except in the first named, are often longer. From fifty-five to fifty-seven a week are quite common in parts of the woodworking trades. In these cases, therefore, attendance involves going straight from shop to school, and a boy has to stick at it almost continuously from the time he gets up until bedtime. In the Building Trades again an early stoppage involves a correspondingly early start and the long distances that have often to be travelled from home to work largely neutralize the benefit of shorter hours. The stronger and keener boys make the necessary effort, often with advantage to themselves, but this is beyond the powers of many. The contention, honestly raised by employers and foremen, therefore, does not appear to be altogether tenable. As yet, however, the matter has not been laid as clearly before them as it might have been, or as it will need to be if their co-operation is to be secured.

Outsiders do not always appreciate the real difficulty in the way of granting leave of absence that is caused by the conditions of the workshop. Overtime is a case in point. A firm may agree to excuse its boys from this, but will sometimes find it impossible to carry out the promise completely, since circumstances will now and again arise when they will have to be kept. Moreover each boy has his definite place and duties. When he works in a squad or as mate to a man, in particular, those with whom he is associated have to stop when he does and if he stops early so must they. But even when he works independently, trouble often arises if he gets behind with his jobs and keeps others waiting, and whilst large firms may be able to employ two shifts, those of small or moderate size cannot afford to do so.

Again, to leave off in this way is not always an advantage to the boys themselves. If there is an interesting and instructive piece of work to be done, a boy is the better for

staying to finish it. Otherwise the foreman may have to hand it over to some one else. He will then have to be given such jobs as will fit in with his hours of labour and so his progress may thus be retarded more than it is accelerated by what he learns at School. Finally, by working overtime during a rush, he may get at the same time good work, good experience and good pay, and desires, as little as his employer does, to leave to attend classes, "and," the Head of a Department in an important School said, "he would be a fool if he did go."

Where a shop is doing its duty, moreover, a boy can and does look to it for the greater part, and perhaps the whole, of his manual teaching. These considerations do not in my view constitute an argument either against the present system of attendance at Trade Classes or against shorter hours for boy labour and compulsory Continuation Schools. Nevertheless care should be taken to avoid as far as possible the loss of valuable workshop experience, and to adapt the instruction and the hours of attendance to the needs of each industry. Indeed, up to the present, the refusal of individual employers to grant time off has often been justified by the failure of the Schools to satisfy these requirements.

Hitherto the actual grant of "time off" has taken various forms. Frequently some afternoons, usually two per week, are asked for; but so far only a few firms have seen their way to grant so much, partly owing to the inconvenience involved and partly because employers generally are not convinced that the Schools can give them an adequate return for the trouble and loss they may incur in this way. Results have been most favourable in the Engineering and Printing Trades, but in the case of the former London conditions sometimes render the policy unworkable. Thus in ship-repairing yards overtime is frequent and unavoidable, and in the case of many of the large number of small shops scattered over a wide area, the time spent in travelling to and from a School is often prohibitive. As an alternative, therefore, and to meet these difficulties, it is suggested that the boys should be excused from work before breakfast on the morning following the class:

More frequently employers are prepared to let a boy leave half an hour or an hour before the ordinary time on the days on which he takes his classes, and when work does not cease till 7.30 or 8 such an allowance is essential. Here, indeed, there is far greater willingness to grant the facilities asked for. It is one thing to give a boy a whole afternoon, and another to let him go a little earlier in order to get a wash and reach the School in time ; and many employers, who have never been asked to do so, appear to be willing to make such an allowance.

The same is true of overtime. Sometimes it is absolutely necessary to keep the boys, notably in ship-repairing ; and in the Art Metal Trades great difficulty arises from the fact that their busy season is in the winter and thus involves the maximum of interference with the Schools. Probably juvenile overtime cannot at present be entirely abolished—even by legislation ; but where the matter is thoroughly taken in hand, it can be enormously reduced, and much better regulated. In this direction, the School of Engineering at Poplar has achieved considerable success.

It is interesting to speculate, indeed, whether even better results might not have been attained if more attention had been paid to such things and less to more ambitious schemes. Indeed, since refusal of time-off does not in any sense involve hostility to Technical and Trade Teaching as such, it might prove advantageous if those concerned were for the present to concentrate their attention on the abolition of overtime for boys and on obtaining facilities for them to reach the Schools in comfort at the ordinary hour for commencing. Far greater sympathy and support are likely to be obtained from the employers, and the desired object may be attained sooner, if less is asked for at first and the pioneers of Trade Schools are content to secure it bit by bit. Again, where more can be asked, absence from work before breakfast on the following morning is sometimes of most value, especially where afternoon classes cannot be arranged, and the boys have long distances to travel. Above all every effort should be made to meet the wishes of employers. Their

attitude towards the Schools is critical rather than hostile, and on the whole favourable to their general work, even though they may not be prepared to give the large measure of assistance involved in more comprehensive schemes. It is up to the Schools themselves, therefore, to convince them of their value, and so obtain this more active co-operation.

Turning to the boys themselves, there is a considerable and enthusiastic minority who attend, and attend regularly, at the cost of much trouble and sacrifice, involving, as attendance often does, a very long day's work, sometimes in face of passive discouragement or even active opposition from their employers. Many others join the Schools for a time, but fail to continue at them. The majority, however, never reach them at all, so that those who use them regularly, and for a considerable period, are a small minority.

Their difficulties and sacrifices are very real. In certain industries there is as yet no special manual or technical training available, though, as a rule, the ordinary Continuation Schools can provide the boys engaged in them with much instruction of value. Hard as it often is, however, to make them realize their need of definite trade teaching, it is far more so to induce them to join classes for the purpose of improving their general education. Where they attend, it is usually for the avowed purpose of bettering themselves at their trades, and only where such a purpose is to be served will they do so. Similarly the willingness of an employer to let a boy off for Technical or Trade instruction will not extend to more general subjects.

Moreover, even where the right kind of teaching is available, London offers peculiar difficulties, which are not present in other towns to anything like the same extent. Its huge size and its rapid expansion involve the travelling of longer and longer distances, since the workers frequently live very far from their work, and home, workshop and school may even be in three separate districts. Thus a firm near the Edgware Road had apprentices living at Neasden and the nearest suitable Institute for them was in Clerkenwell.

Hence time spent in travelling may be a very serious item. Again, even if school and workshop are close together, there may be a tedious delay between the close of the one and the opening of the other. The position in Printing is comparatively favourable, since a large part of it is concentrated round Fleet Street with St. Bride's and one or two smaller institutions in the immediate neighbourhood, though firms in the outlying districts are not nearly so well served. On the other hand, the Building Trades are scattered all over London, and in some branches every job may be in a different place. The same trouble indeed arises to some extent in the engineering trades. Further, where an industry is scattered, the adoption of a definite policy by employers is far more difficult to secure.

The more localized trades, on the other hand, afford better facilities, especially in those cases in which the employers prefer to draw their labour from the immediate neighbourhood or from adjoining districts. To this extent conditions are especially favourable in the Pianoforte Trade and in the Bermondsey Leather Trade, but with them other difficulties have hitherto hindered the development of such teaching. The Cabinet Trade is similarly concentrated in East, and the Art Metal and Instrument Trades in Central, London, and in both cases considerable provision for trade instruction is already made.

Overtime is a further cause of trouble, even where the arrangement of the ordinary hours of labour is convenient, and leads to considerable irregularity of attendance, more particularly as it is not always possible to tell in advance when it will be necessary. The fact already noted that the working of overtime is not always nor altogether an evil further complicates the matter. Nevertheless its disadvantages usually outweigh its advantages. Moreover, the trouble is unusually acute in London, because the business of a repairing centre frequently renders rushes of work inevitable. This is especially true of ship-repairing, since the ships have often to be got ready for sea at the earliest possible moment. Under this and similar circumstances,

therefore, overtime, both for men and boys, is practically unavoidable. This fact must be taken into account, and its result is not only to make attendance spasmodic, but to decrease the number of students. The difficulty of learning is increased, and the value of what is learnt diminished, and so some of them drop out. The trouble is further accentuated where the busy season, as in Silversmithing, falls in the autumn, winter and early spring.

Thirdly, the ordinary hours of labour may prohibit, or seriously restrict, attendance, though in this respect London is somewhat better off than some other large cities. The most palpable case is that of the vanguards, who have to work as long as the carmen and may even put in as much as seventy-two hours or more in a week. Many of the errand boys employed in the delivery of goods are almost as badly off; and in many trades work in the lower grade factories is continued far too late to allow of attendance at Trade Classes. Moreover, even where they are not too long, hours are often so arranged as to render it practically impossible without the co-operation of employers, and though such co-operation is more frequently forthcoming than many people suppose, they are not always able or willing to modify them.

The Schools are usually open from 7 till 9.30, and many boys cannot reach them before 7.30. Sometimes hours begin and end early, and this difficulty does not arise, but in several industries work in some shops continues till 8 or 8.30. Hence where boys are not free till 7.30 or later, the value of their school work is seriously diminished, whilst a 7 o'clock stoppage involves great rush and strain, even when school and workshop are close together. This point is not always grasped by employers whose works close at this hour, and many of them hold that in such a case a boy has ample opportunity to attend in his own time. Apart altogether from wider questions, therefore, the possibility of an earlier start and finish, as in the Building Trades, is worth considering.

It is even more important to inquire, however, whether

the hours at present worked by the boys are such as to prevent them from profiting, or from profiting fully, by the instruction they receive. In other words, "Are they too tired, after an ordinary day's work, to attend an Evening School as well?"

Replies to this question are conflicting. Principals and Instructors are almost unanimous that too great a strain is imposed, and that of those boys who attend and profit by it a greater sacrifice is required than they should be called upon to make. Where, for instance, they have to be in the workshop from 8 till 7, and then go straight on at the School till 9.30, they have hardly a spare moment to themselves from the morning of one day till the evening of the next; and this often happens not once, but several times, in the week. Even under these conditions, boys engaged in manual work often appear to be bright and lively, but with the more technical subjects, and at all kinds of book-work, many cannot keep awake, and others who can fail to grasp the instruction they receive.

Many foremen, on the contrary, declare that the boys are not too tired after the day's work to get full value from what they are taught, and that the classes themselves form a change and relaxation after their day's employment. They suggest, however, that they should not continue to do the ordinary work of their trade, but something bearing upon it, which is at the same time "interesting and recreative." Its general principles, and the applications of science to it, are usually suggested, because by the light they throw on their daily work they will interest and instruct them at the same time. Many foremen will add that "they are never too tired to go to a music hall."

It is necessary, moreover, to guard against exaggerating the amount of strain involved in a boy's work. Some undoubtedly are kept hard at it all day, but this is not the case with all. "They are not driven as hard as all that," one foreman said. With many, and with young boys in particular, much of the work is light and easy, and its faults in many cases lie rather in monotony and lack of interest,

as with semi-automatic machines, or in the mere length of the hours. Others, such as those who wait on the men generally and run messages, have intervals of rest or idleness and, as one employer put it, "they are out in the air all day delivering messages, and they take their own time about it."

Probably, therefore, where the hours are reasonable, and the work not too hard, a boy can attend with profit to himself and the sacrifice involved is not more than sufficient to prove a fair test of his keenness. "The boy who is eager to get on will go," it is often said, or "the boy who will rise in life is the one who attends a Technical School." On the other hand, where hours are long or the work heavy, only the strongest and most energetic can stand the strain. Whilst, therefore, in the view of some the classes benefit by being confined to those who are keenest, and might suffer if attendance were to be made too easy for the less keen, there can be little doubt that conditions are often, though not always, such as to put evening instruction beyond the reach of a great many.

If, however, numerous failures to use the Schools result from such industrial conditions, they are frequently due to quite other reasons. Many boys show little interest in their trades outside their work in the shop, and this lack of interest is not confined to those who get no direct encouragement from their employers. In not a few cases, indeed, definite offers of facilities for using a Trade School are refused, and employers have stated that they have had plenty of requests for leave of absence for other reasons, but never one for this purpose. Other boys, too, feel that they are learning all that is necessary in the workshop, and that they do not require further instruction, and many of the teachers insist that failure to utilize the Schools is frequently the result of not realizing their value rather than of any lack of energy or willingness.

Trade Classes, again, have to compete, on the one hand, with legitimate substitutes, such as Clubs, Brigades or Boy Scouts. Many energetic members of the latter never put a

foot inside an evening school. Such bodies exercise much valuable supervision and control and often the boys are kept under a considerable amount of discipline. Indeed, where they are not learning a skilled trade, membership of such a body may even be preferable to that of a school or class, and if it gives less of some things, it can give more of others,—of discipline, of control and, above all, of corporate life and responsibility. Both are necessary parts of our social life, but in some cases only one of them can be utilized and not both.

On the other hand, there are many counter-attractions, which keep boys away from the Schools, and do nothing to fill their place. Such things as music halls, picture theatres, and the various delights and attractions of the streets themselves, are especially numerous in London, and their influence, considerable in most large towns, is peculiarly great there. They form a great stumblingblock in the way of the full use of opportunities for trade teaching: and in small towns and country districts boys pay far greater attention to learning their business, because the counter-attractions are so much less common. "Two boys in the country," one foreman said, "will often be found talking together about their trades, having little else to talk about. In London you rarely or never find them doing so." This, in fact, is another of the special difficulties of town life, and of that of London in particular, that whilst there are far better facilities for obtaining instruction than elsewhere, other conditions reduce the will and desire to take advantage of them.

These, therefore, are the chief external causes which limit the use of Trade or Evening Schools, and which hinder and cut short attendance at them, or even prevent it altogether. A further internal influence arises from a boy's own attitude towards work and school. When he leaves School, he reaches a point at which the earning of wages first takes a definite place in his life and learning, even in the case of an apprentice to a highly skilled trade, occupies at

most only a part of his mind.<sup>1</sup> It is apt, indeed, to get thrust into the background altogether, more particularly with those who are doing only labourer's work. A lad's attitude often is that, having left school, he is finished with bookwork and henceforth his business is to earn wages. Moreover a very large number, on leaving school, enter temporary jobs in which they are not likely to remain, and not knowing their ultimate destination have little incentive to attend classes. For these reasons, therefore, many either fail to see the need of keeping up their schooling, and drop it entirely, or, even if they only do so temporarily till they find out their walk in life, they may for one reason or another come to do so permanently.

One may add that the attitude of the Public School Boy is often much the same, with the difference that he stays at school some years longer. Hence at fourteen a boy, however well he may have been taught, has not assimilated his knowledge as he will have done by seventeen or eighteen, and is far more likely to forget what he has learnt. Moreover the occupations of the Middle Classes practically compel many of them to acquire further knowledge. For the reasons given, therefore, the instincts and feelings of lads of fourteen are naturally unfavourable to a continuance of their education, and the temporary enthusiasm for Evening Classes, which has been aroused in many of them during their last few months at the Elementary School, is evanescent and quickly wears off.

Secondly, some difficulty is also caused by the purely practical or "bread-and-butter" view that is taken of their functions. This, indeed, is inevitable, since boys of fourteen, or even older ones, have little chance of taking a wide view. So they go to a School in order to learn their business better and to earn higher wages, not to acquire craftsmanship for its own sake or the scientific principles of their trades. This, indeed, is only natural ; but many of them take too narrow

<sup>1</sup> This is true of the great majority of boys. Those who have engaged in street trading or who have worked out of school hours have already started to earn before they leave school.

a view of what will help them to achieve their objects. A knowledge of general principles and of the application of science to their employment will assist them not only to learn the details, but to advance themselves to higher positions at their work. This, however, they fail to see. Instructors complain that many will only attend for purposes of manual instruction, and that their presence at other classes is only secured by making it a condition for obtaining this. Moreover, this attitude is naturally far more marked in the boy labourer than in those learning a skilled trade. The latter sees even less clearly the value of schooling which bears only indirectly on his work. When, say, a cabinet-maker goes to a Trade School and learns to make a better piece of furniture there than he makes in the workshop, the benefit is clear to him. The advantage which a messenger or general factory boy can derive may be no less great, but it is far less obvious. Hence for the successful extension of Continuation Schools a change in the mental attitude of parents and children is of little less importance than an alteration in the conditions of labour.

In this connexion, therefore, some account must be taken of those—and they are many—who start to attend a school and fail to continue.<sup>1</sup> One satisfactory feature here is that the leakage of this sort, which is very great among the younger boys, grows appreciably less as their age increases. Between fourteen and fifteen, indeed, the numbers enrolled are much larger than in later years. But as the enrolments decline, there is a steady improvement in the proportions qualifying for grants, and from a little more than one-half between fourteen and fifteen, these rise to nearly three-quarters between eighteen and twenty-one. It is true that a minimum of fourteen hours during a session gives this qualification, but it is something that a larger percentage should achieve even this modicum of regularity.

One important cause of these failures, as also of neglect to make any attendance at all, is as follows. Education Authorities, Teachers and Care Committees do much to

<sup>1</sup> Appendix III.

popularize the Evening Classes, so that many boys leave the Elementary Schools with a real desire and intention to use them. Sometimes this enthusiasm is unlikely to be permanent in any case, but often, if properly provided for, it might become a real and lasting thing. Unfortunately many of them are allowed to "go by default." The Evening Classes close for some months in the summer, and for the weeks before they do so, knowledge of this fact deters students from entering them.<sup>1</sup> As therefore boys usually leave school immediately after their fourteenth birthday, several months may elapse before any classes are available, and by this time they may have forgotten all about them or acquired new interests. This also causes considerable loss of students between one session and the next.

Other influences further increase both irregularity of attendance and failure to continue it throughout a single session. Many boys fail to grasp the instruction given, especially that of a more technical character, and so grow disheartened. Sometimes the fault lies in defective Elementary Education; at others an interval elapses before they reach the evening classes, and they have forgotten much of what they have learnt. This difficulty the County Council are attempting to overcome by means of preliminary courses in Junior Institutes. Others are too tired to grasp the teaching, or too frequently absent from overtime and other causes to follow it properly when they are there.

Again, it is not always possible for the classes to suit the requirements of all the boys; and another and even more potent source of irregularity consists of their frequent changes of job, especially where these involve also changes of hours. To take one instance, a boy left school very keen on attending an evening class, and threw up his first place partly because he worked too late to do so. In his next position, as bookstall boy, he was for a time able to

<sup>1</sup> The reason for this practice is the difficulty of keeping the students together during the summer, and this difficulty will probably be overcome only by compulsion.

get off at 6, but, being promoted, he had to stay till 8 and abandon the class. Many also simply get tired of the work, and some have never had any real enthusiasm for it, and only go because among their friends it is "considered rather a smart thing to do." Upon others, again, the importance of attending the classes has not been properly impressed whilst they were at the Elementary School. Each of these causes, therefore, inevitably leads some to fall out of the ranks, as difficulties arise or counter attractions prevail, and in the aggregate the number is very considerable.

Whilst, however, attendance for a few weeks or months only is in itself almost valueless, it holds out some promise for the future. For the problem of keeping boys at school, once they have started to go, should be simpler than that of compelling or inducing them to go *de novo*. For it is less unwillingness or hostility that has to be overcome than lack of perseverance. So far, therefore, there is better groundwork on which to build a compulsory system; and the task will be easier if improved opportunities are given to the boys in the form of shorter hours of labour or the restriction of overtime. In short, the Schools have reached much the same stage with the boys as with the employers. They have made some progress in creating a "habit" of attendance; and if there is much still to do, much has already been done. There is already a considerable body of earnest and enthusiastic students, and many others are ready to give them a trial, even if this trial leads to nothing. This "habit" of attendance, too, is the more valuable because it means that in time such attendance will be made, as in some parts of Germany, as a matter of course. For this, however, compulsion will probably be required. Thus the present situation is by no means without promise.

In conclusion may be mentioned the different changes that are likely to be required. From what has been said, various improvements in the conditions of boy labour appear essential. The raising of the school-leaving age to fifteen may be necessary for many purposes, including that of

linking up the teaching of Elementary and Continuation Schools. There will also be numerous detailed alterations which cannot be discussed at present. But if there is to be compulsory attendance some reduction in hours is a *sine qua non*. The system, when established, will need to be carefully organized, more general education occupying the earlier part of the course, and a larger proportion of specialized training being introduced later. The period of compulsion will probably be one of three years, and with this rough outline the matter must be left for the present.

## CHAPTER XIV.

### SOME PROBLEMS OF RECRUITING.

- (a) THE TYPE OF WORKSHOP.
- (b) MACHINERY.
- (c) THE PROVINCIAL INFLUX.

- (a) *The Type of Workshop*.—Advantages of the Large Concern—Its More Careful Organization of Teaching—Its Disadvantages—Over-Specialization—Work taken over by Machinery—Repetition Work—Want of Personal Intercourse between employer and learner.

Advantages of Smaller Firms, and their disadvantages—Those of moderate size most favourably situated—Special Disadvantages of very small firms—Good Partial Teaching in some cases.

Two other Conditions of Importance: the Type of Shop Predominant in a trade; Character of the Work often more important than actual Size of the Business.

- (b) *Machinery*.—Forms which its influence takes—Reduces range of skill, but leaves process a skilled one—Its operation in this case not uniform—Creation of new Semi-skilled Processes—Substitution of Female or Juvenile labour for that of men—Variations in its influence: London less affected in some respects than other places—Tendency to render labour less arduous and in certain cases to an actual increase of Skill.

Reduced Demand for labour for a given output—Usually compensated by increased demand in the same or some other trade—Circumstances peculiarly unfavourable to London—Influence of Machinery in particular industries.

- (c) *The Provincial Influx*.—Common to all large cities—Reasons for it—Presence of able men with ambitions—How they reach London—Superior energy and application claimed for them—The Pick of the Provinces competes with the Average of London—Influx of labourers: its results—Industrial and Social Advantages of provincial workmen—Better Health—Fewer Counter-Attractions—Smaller Size of normal firm—Position of small firms in London—London Methods of Training often inferior—Greater Expense of teaching there—Employers' Reliance on the Influx.

**Trade Distribution of the Influx**—Greatest where both its main causes are in operation—Small : Printing, Bookbinding, Art Metal Work—Intermediate Position of Engineering and the Leather Trades—Large, with some exceptions, in Building, Wood-working and Furniture Industries—Information supported by Proportions of Foremen in these trades who are or are not Londoners—Influx not limited to special areas.

**Its Causes**—Some Irremovable—Others remediable—**Means of effecting improvement**—Summary and Conclusion.

THE question of Recruiting, or of the sources from which employers get their boys, is closely allied with that of training, and is specially important in London, because her employers obtain a greater supply of labour from outside her boundaries than do those of other large towns. This is partly due to natural causes, such as the desire of the better workmen in the country to improve their position, partly to the general conditions prevailing in London and the methods of production adopted there, and partly to more or less remediable defects in its system of teaching. In relation to these latter, however, two other questions have to be considered, the position in connexion with Industrial training of large and small shops, and the influence exerted upon it by the increasing use of machinery. The chances of the London boy are affected by both, and they need to be considered if the problems associated with the provincial influx are to be fully understood.

(a) **The Type of Workshop.**—Uninformed opinion often favours the large firm for the purpose of teaching a trade, but many experts prefer one of small or moderate size. The value of each of them varies from industry to industry, and often it is less the size of a shop, than the character of its business, that is important. The large concern possesses numerous advantages. Usually, though not always, it obtains work of a finer quality, of greater variety, and of a more important nature, whereas a smaller one may only get a succession of odd jobs. It can afford to employ the best foremen and the most experienced men. Moreover employment, at least so far as the boys are concerned, is often more regular ; they are more likely to be kept on during

slack seasons ; and they are, as a rule, more highly paid.

Lastly, the teaching itself is more generally organized upon some definite plan. The number of learners and the conditions of their work are more systematically arranged and fewer boys are employed casually and dismissed at a moment's notice. Large firms, therefore, have many merits, and sometimes it is only in them that a lad can learn the finer branches of his business, so that he may have to spend at least part of his time in one of them.

These merits, however, are frequently offset by serious disadvantages. The first arises from the specialization of processes and the division of the trade into a number of branches. The large Engineering shop, for instance, has separate classes of erectors, fitters and turners, and the large Builder of joiners and carpenters. Hence their organization often renders it necessary for the learner to confine himself to one of these, and at this he becomes very expert. In London, moreover, the number of firms which require skill of this character is often small, and thus a lad who has been taught in one of them is at a disadvantage in competition with those who have received a more all-round training in a smaller firm. Secondly, without specialization being carried so far as this, parts of a trade may be taken over by machinery. Now if these are the rougher and simpler ones, the boy may be deprived of just that sort of work upon which he can most easily start to learn. Or some of the more difficult and important processes may never come his way, so that, without being exactly specialized, his knowledge is not complete, and will not be completed, unless he takes steps specially to remedy this by attendance at a Trade School or by other means.

Again, whilst getting great variety in many ways, a big firm, working on large orders, often has much repetition work, the same job having to be repeated over and over again. Hence the learner does not obtain sufficient variety, nor as much as he will do in many smaller ones, whilst in repair shops and in those working on retail orders this variety is almost infinite. At the same time, this is

not true of all large firms, and important instances, pointing in the opposite direction, can be quoted. Nevertheless, taken as a whole, and especially when producing for a wholesale market, they do get a considerable amount of repetition.

Finally, in the biggest concerns close personal relations between employer and learner are far more difficult to secure. The former is mainly occupied with the commercial side of the business and spends his time in the office, and not in the workshop. Frequently he is "not a practical man" and so cannot himself teach. At best he can only exercise a general supervision, and the boy has to be put in charge of a foreman or be by him delegated to the care of a man. Moreover, in these conditions, it may be difficult for a foreman to find sufficient time to teach the apprentices, though this is not common. Some, however, "won't be troubled" and others are unduly nervous of spoilt work and are apt to keep the boys back; or, again, the lad may not be put into the charge of any one in particular, and what is every man's business is no man's business and so no one takes special care of him.

Above all, the tie of a close personal intercourse is almost necessarily lacking. It is not that the larger employers fail to take an interest in their boys. Indeed, many big firms take a pride in turning them out well. But the smaller master constantly sees and supervises, and may even work with, those he has; and from continuous association acquires a personal interest in them and in pushing them on; and this is most valuable when it is thus acquired. For the interest that is practically a habit is of more value than that which is merely a virtue; and so that which is taken by the small man may produce better results because it is necessarily greater and more persistent.

The advantages possessed by shops of small or moderate size may now be considered. First, provided that they get sufficient work, they often give a more general all-round training, since in them division and specialization of labour cannot be carried so far. Many also get considerable variety and have less repetition work, so that a boy has

to be put to all kinds of jobs and be ready to turn his hand to everything. Usually there is less elaborate machinery, and the proportion that is done by hand is greater. In the wood-working trades, however, some small hand-shops are such only in name, for they buy all their parts already cut and do little more than fit them together. The boy's more intimate relations with his employer in a small firm have already been touched upon.

As with large ones, there is a balance of advantage and disadvantage, and it is not every business that enjoys all of these benefits. Here the conditions in the small, and especially in the very small, shops are different from those prevailing in firms of moderate size. Many of the former do not get much good work or are engaged on making cheap, common stuff, the learning of which is of little value. Some can give no more than a general grounding in the trade which can be followed up elsewhere. Others do not even do this. Again, some of them are as highly specialized as any large business. Indeed specialization of product or output is often most common where small masters are most numerous, as, for instance, in the wholesale Furniture Trade. Frequently only a very few articles ever come into the shop at all, though one such firm will teach more than another. Thus if it is engaged upon one elaborate article, a boy may learn a large part of the work. If not he may barely acquire its rudiments. Further, if, as some do, it subsists mainly on small odd jobs, it may never be able to give him any proper idea of the trade as a whole, and to such a one what has been said about larger repair work does not apply.

Moreover some small employers either lack ability as teachers or are themselves incompetent workmen. In a large firm such capacity in the employer is not so essential, for it can afford to engage competent foremen and men, some of whom are almost certain to be able to teach. The small man, on the other hand, having only a few employés, has much less chance of finding such a one, especially if he is engaged on cheap second-class work, when they are probably inferior workmen. At the same time, many small shops

do teach a trade exceedingly well, though whether they can do so or not will often depend upon the personal abilities of the "guv'nor."

Finally, certain abuses are specially prevalent among the smallest firms, such as the practice of the "premium-hunter," who, without proper means or capacity to teach, takes a succession of apprentices for the sake of the money to be obtained with them. Others take several boys, nominally as apprentices, with only one or two men, and they divide up the work among them and use them practically as labourers. Or, again, a lad engaged on certain rough work, such as filing-up, may, in order to induce him to stay, be led to understand that he will be taught and then turned adrift, knowing nothing, after three or four years.

These defects are far more marked in the smallest shops than in those of medium size or in the moderately small ones, and many of these are also free to a great extent from the worst features of the larger firms. They may thus combine most of the good, and escape most of the bad, characteristics of either, and so are in the best position to satisfy all the requirements of good teaching. Compared with these others, their work is usually both good and varied, and sufficiently regular to give continuous employment. They are less specialized than the large businesses, and do more of their work by hand. They are of sufficient size to ensure proper facilities for training and yet not too big to allow of a close contact between employer and apprentice. Thus the best shop for learning a trade will, as a rule, be one that is neither very large nor very small.

Some small shops, however, which cannot teach a trade throughout, may yet be able to give an admirable grounding in it. Small plumbing firms are specially useful in this way to fill up the time till a boy is strong enough to stand the heavier work; and elsewhere those which make parts and accessories may give him a good start by teaching him to handle easy tools and machines. At the other end of the scale, large shops doing only finer and more intricate work

may be excellent to finish in, whilst lacking what is required in the earlier years of training.

For such businesses, therefore, special provision is required. Evening Trade Schools may help to fill the gaps by assisting a boy to learn those kinds of work he does not get in the day time. Even better, however, is the policy of starting in a small shop to obtain a general idea of the trade and going on afterwards to complete the teaching and learn the finer qualities in a large one. To some extent this is already done and with proper organization the practice could be considerably extended, and so would meet the needs of a good many boys, which under present circumstances are not fully provided for.

In conclusion two points are worth noting. First, much will depend on the type of shop which is predominant throughout a trade. Where work is mainly carried out by businesses of large or moderate size, these get most of the better work, and the little firms subsist mainly on small orders, repairs and odd jobs. Hence they are apt to lose some of their advantages and consequently of the value of their teaching. Where, however, as in the Art Metal Trades, a smaller type of concern is usual, they obtain their fair share of all kinds. So, too, in some of the smaller towns, the scale of production is never very large nor is any single firm very big, and here again the different qualities of work are well distributed.

Secondly, the character of the work is often of more importance than the size of a business, so that usually one engaged upon a general trade or upon repairs of a good class is best able to teach. Such businesses, indeed, are frequently large, as in the case of Ship-Repairing in Millwall, and of the large West End Furnishing houses employed upon retail orders of a high quality. Again, in Printing the least suitable Offices are those, whether large or small, which only do plain book setting, and the best those which do book, jobbing, and display work. In this case quality is, as a rule, the deciding factor, and here the bigger firms often have a distinct advantage. The size of an establishment,

therefore, is not the only influence, but it is an important and frequently a decisive one. With some exceptions, indeed, the shop of moderate size offers the best opening for training, and the two extremes—large or small—the least good, and London's position in this respect will be shown later to have some bearing upon the provincial influx.

(b) **Machinery.**—Another important element in the problem consists of the continuous introduction of fresh labour-saving Machinery, which affects the worker in various ways. Its influence has already been considered in other connexions, but the matter is sufficiently important to justify its separate treatment here, even at the cost of repetition. First, machines take over parts of the work, being operated either by an existing class of workmen such as the wood-working machinists or by a new class such as the silver-spinners; whilst the old handworkers receive their material in a more finished state than formerly, or do not have so many processes to perform upon it. In a few cases they even operate the new machines, as the compositors do the Linotype or as sometimes happens in the Bespoke Boot Trade. In such cases, therefore, the number of men required to produce a given output is reduced, but they retain their position as skilled mechanics. Their range of work, indeed, is smaller, but this more often means a concentration of skill and not a loss; for while they have to do less than formerly, they are required to do it better, more rapidly and with a finer finish.

The position is still further complicated by the fact that in many London industries the introduction or development of machinery is by no means uniform. Hence the man who has learnt his trade in a machine-shop is often at a disadvantage in competition with those who have done so in hand-shops. Where wood is elaborately prepared in a sawmill, for instance, the joiner has never learnt to cut and prepare it in the way that many others have had to do, and thus is in some ways a less dexterous and experienced workman. In his own particular sphere he may possess greater skill, speed and accuracy, but for the more all-round

workmen from the hand-shop to acquire these is often only a matter of time. Again, the taking over of much of the easier work by machines may actually render a trade more difficult to acquire than heretofore.

Secondly, machine production may alter the character, or grades, of the labour required. Processes forming one skilled craft may be split up into a number of different jobs, and the artisan be replaced by the semi-skilled machine-minder. Thus in the factories a boot is no longer made by a single man but is divided up into parts, and each part into a number of processes. The more important are performed by men, the less by women, boys or girls : but each worker sticks to his or her own. Most of the work is semi-skilled, though some of the men earn high wages. A similar development has taken place in Publishers' Bookbinding, and in large Engineering shops there are growing numbers who work each a single machine, and most of whom earn wages about midway between those of a mechanic and those of a labourer. In Engineering and Bootmaking, indeed, specialization is less common in London than elsewhere and has not been carried so far, but it has been carried further in Bookbinding.

Thirdly, male adult workers are sometimes completely displaced by boys, women or girls. In the boot trade, as mentioned in the last paragraph, all four classes are found working together. In brushmaking the process of boring is done almost entirely by girls, In the cheaper forms of tinsmithing and silversmithing boys are employed to "stamp out" the parts and a few skilled solderers to fit them together. In most trades, again, semi-automatic machines are usually worked by boys. These changes also have been further developed in other places than they have in London.

Indeed, the influence of machinery generally varies from place to place, and this in turn affects the character of the provincial influx. It is little developed in country towns and villages, and those brought up in them possess the advantages that are associated with handwork, so that,

compared with them, Londoners, and those brought up in any large town, are usually at a disadvantage. London is most affected by changes of the first class, since the substitution for the artisan of other kinds or grades of labour has not as a rule been carried so far there; and in these respects it is on the whole in a better position than other large centres, notably in tinplate work and silversmithing, and, to some extent, in engineering. Sometimes, on the other hand, the fact that only a few firms have fully developed this subdivision has created a special problem; but as a rule the London workman is in this respect comparatively well placed.

Allowance must be made, however, for the benefits which an extended use of machinery confers on the workmen. It has taken over much of the heaviest, hardest and most monotonous work,<sup>1</sup> and in some cases has substituted a higher for a lower grade of labour. On large buildings, or where travelling cranes are used, the semi-skilled craneman has replaced the unskilled hodman, porter or docker. The compositor operating the Linotype is a more skilled man than he was before it was introduced; and the excessive amount of boy labour required in certain trades has been reduced by mechanical improvements. Thus in the rivetting of boilers only one boy is needed when hydraulic blasts are used, instead of two when they are not.

To sum up, therefore, the effects of developments of

<sup>1</sup> Compare the evidence of Mr. F. A. Moore, a Builder's Foreman, before the Labour Commission (March 15, 1892; questions 18,828 and 18,829).

"Have you formed any opinion as to the value or otherwise of machinery in connexion with your trade?"—"I certainly think that machinery is a capital thing from every point of view that I can conceive, both from the point of view of the employer and from that of the workman."

"It prevents a workman from being a mere beast of burden and makes him a more intelligent and useful man?"—"Undoubtedly it relieves him of all the mechanical drudgery. I can distinctly remember, when I was a youth learning my trade, having to 'stick mouldings,' as it is known in the trade. Anyone who knows the thing practically knows that that is a tremendously heavy physical labour. The thing is perfectly unknown at the present day."

machine production are as follows. Sometimes it merely alters the character of the skill required, usually by concentrating it within a narrower range, but raising its level. Sometimes it reduces its amount, whilst still leaving the trade a skilled one. At others it replaces the mechanic by the semi-skilled man or by female and juvenile labour. Less frequently it substitutes a higher for a lower grade of labour.

Lastly, it decreases in the trades concerned the total amount of labour required to accomplish a given output, but for this there are many compensations. It directly increases employment in other directions, notably in machine making and in the manufacture of iron and steel. Coal Miners again benefit from the greater demand for coal which is required for running the machinery and an increasing number of engineers are needed to keep it in repair.

Normally, however, the output of the trade affected does not remain the same as before. The lower cost of production increases demand, usually to such an extent as ultimately to offset or more than offset the economy of labour due to improvements. Indeed, in some cases their introduction is rendered necessary in order to cope with a growing demand, whilst without it some articles could not have been put on the market at a price within reach of the great bulk of the consumers. In fact, it is only where the demand is very inelastic that it does not show at least some considerable increase.

Taking everything into consideration, therefore, developments of machine production tend to an expansion rather than a contraction of the demand for labour. But for the time being its results are often bad. A temporary decrease until the greater cheapness has had time to take effect may cause displacement or prolonged unemployment. Occasionally, too, there is a permanent decline in the number of artisans in a particular trade, especially where semi-skilled men, women or boys are substituted for them, for even where they can acquire the new processes of working the change means necessarily a serious decrease in their

earnings. Moreover, London sometimes gets the disadvantages and few of the benefits of these developments. It bears such loss as there is, whilst the increased production of machinery and coal is carried out in other districts.

Their extent and character varies from trade to trade, and those of Building, Woodworking and Furniture are perhaps the most affected, whilst those of their branches which are not so influenced suffer in other ways. Thus iron and lead pipings are produced in more elaborate forms, and this leaves a smaller amount of jointing to be done by the plumbers. The substitution of electric light for gas has decreased the amount of internal painting, and ferro-concrete has seriously affected bricklayers.

On the other hand, the Engineering Trades in London mainly require all-round men for the reasons already given. Stamping-out of the cheaper work is very common among silversmiths and metal-plate workers; and the use of the spinning lathe has created a new class of silver-spinners. In the Art Metal Trades as a whole, however, much of the work is done throughout by hand, and the makers of Optical and Scientific Instruments have suffered little reduction in skill. In the Printing Trades, again, the linotype has, if anything, increased that of the compositor, and the use of more and more elaborate machinery, coupled with the enforcement of the Apprenticeship system, appears to have done the same for the machine managers. In the opposite direction the division of Publishers' Bookbinding and of the wholesale boot trade into a number of semi-skilled processes has already been described. The manufacture of the lighter leathers has been similarly reorganized. Glazing and finishing have in nearly all cases become semi-skilled machine processes. At machine splitting high wages can be earned, but fleshing and currying are almost the only skilled hand processes, and the latter is feeling the competition of leather-shaving machinery.

The influence of machinery, therefore, is varied. Sometimes it increases the skill of the worker and sometimes it decreases it, and not seldom it simply alters its character. On the

other hand, numerous processes have been taken over by an entirely new class of workers. The phenomenon is not peculiar to London, which is affected more in some trades and less in others than other places are ; and all these facts have an important bearing upon the influx of provincial workmen.

(c) **The Provincial Influx.**—The problems created by the migration into a place of labour which has been trained elsewhere are common to all large towns, and not peculiar to London, though perhaps felt most keenly by it. Where a town has one or two localized industries, this influx is less extensive, and such are usually recruited mainly from their immediate neighbourhood. Instances of them are the Pianoforte, the Art Metal and, above all, the Cotton, Trades. Thus the big commercial centres, like Manchester, or those with numerous industries of a moderate size, most nearly resemble London in this respect, and it is in trades like Building, which are found in every town and in almost every village, that the big cities obtain from outside the largest proportion of their labour.

The reasons for the influx are much the same everywhere. The abler and more ambitious workmen go where wages are highest and the chances of rising greatest, and whilst higher cost of living may reduce the real benefit of the former, it is probably the latter that means most to the ambitious man. And London obtains a peculiarly large supply because of the ideas that are prevalent as to its wealth and opportunities. Again, at the other end of the scale its relief organizations and openings for casual employment attract a lower class of men, but other towns with large docks, such as Liverpool, are also affected in this way.

Most of the outside labour that enters London, however, comes from the higher, rather than from the lower, grades, and this is the first cause of the displacement of the Londoner. Those who come in are mainly of a superior quality. I do not mean that labour as a whole is necessarily more competent outside London, but that usually the better and more energetic men from each district come to it, in order to make

the best of themselves. Thus in the words of a foreman stonemason: "I learnt my trade in the quarries in Cumberland, but did not stay more than a few weeks there after I was out of my time. I knew my value, and I was not going to stay there, getting 5½*d.* per hour when I could get 9*d.* in London." Some of those who come are young married men, and they in their turn put their children into good positions. Hence, with some exceptions, it is the pick of the provincial workmen who are competing with the average of those of London.

They come to London in various ways, some of their own accord, though usually they have a place awaiting them, which has been obtained through relatives or friends who have preceded them. Secondly, employers and foremen not seldom lay themselves out to fill vacancies in this way and can generally find somebody among their workmen who knows the sort of man they want. Thus in the Building Trade boom (1895-1900) actual shortage was rarely experienced because "there were always men coming in from the country." Finally, provincial firms obtaining London contracts bring up men to assist in carrying out the work. These are, as a rule, their best hands, and some of them stay on permanently in London after the particular job is finished.

Those who come, therefore, are usually above the average in ability, and for this reason are sought after by London employers, whether as fully-trained men or as improvers. Sometimes they are also superior in energy, application and knowledge of their business. Thus a foreman engineer said, "In the North they do not work in collars, and they look in every way more workmanlike. I used to be asked when I first came to London if I was accustomed to working with wild beasts. In the North the men and even the women took a far greater interest in Engineering and had a far greater knowledge of it than the men have in London. I sometimes tell them, 'My mother knew more about engineering than what you do.'"

The provincial workman, therefore, has an initial advan-

tage, and this is increased by the superior training that he often gets. The stress falls mainly on those of average ability or less, but is also felt by the more capable, more particularly where London methods of teaching are not good. Many of the ablest London boys, however, enter the commercial and clerical employments in which it abounds.

The influx, moreover, includes labourers as well as artisans, whom lack of opportunity in their homes, and, until quite recently, agricultural depression have driven to London. Usually of a higher social standing than the town labourer and with their intelligence sharpened by country life, they look for something better than a labourer's job and recruit those skilled trades into which entry is most easy for them. Thus experience of rough stone work, for instance, helps them to make a start in the easier kinds of bricklaying, an employment in which few London boys are engaged.

Further, it is sometimes argued that the men who come from smaller towns and districts, apart from the proportion of abler men among them, have all certain advantages over the Londoner. Their conditions of life render them stronger and healthier. Intellectually the latter may be sharper and quicker; but the variety of wood and field, of bird and animal life, develops better the countryman's powers of observation, whilst those of the Londoner are stunted by the monotony of bricks and mortar. So whilst he may pick up individual things more quickly, his country rival has learnt to observe more deeply and therefore grasps better the whole idea of a trade.

Again, the pleasures and excitements of town life often unduly distract a boy's thoughts from his work, whilst in the country this is often his chief interest. "In the country," said a foreman who had learnt his business there, "you often see two boys together talking about their trades—in London never." And this disadvantage, common to a great extent to all large towns, is not altogether compensated for by the fuller provision for technical instruction which most of them possess. Much of the influx, therefore, is not only inevitable, but such as it would be impolitic

to try to stop ; and the presence of a body of picked men from outside must be accepted. At the same time other disadvantages in this competition from which the London workman suffers can to a great extent be removed or mitigated. In creating them three influences are specially noticeable, namely, the organization of production, educational methods, and the expense involved in teaching boys.

As described in previous sections of this chapter, shops of moderate, or of moderately small, size are usually best suited for teaching a trade. The large machine shops, on the other hand, give and require less all-round skill, but a higher level of it concentrated within a narrower range. The best to learn in, therefore, is one that is small enough to do a great deal by hand and for the employer to be in close touch with his boys, and large enough to get good and varied orders. For in it the lad has of necessity to be put to all kinds of work and an all-round training is practically ensured.

Now in small towns from which, as a rule, the influx mainly comes, this is the normal type of business. The scale of production is generally small so that these firms get the best work, whilst, when they are working among a number of large ones, they often fail to do so. In London, on the contrary, production is often on a large scale, much machinery is used and, even where it is not, processes and output are specialized. The big firms get most of the best work and the smaller ones fail to obtain their share of it. Thus frequently only a small proportion of them are well situated in every way for the purposes of teaching. In a few trades, indeed, like Printing and the West End Furniture trade, London has an advantage over other places, but normally methods of production make the giving of an all-round training difficult.

Secondly, in smaller places training is often more regular and systematic because things lend themselves more easily to definite conditions of service. A boy has less opportunity to drift from firm to firm, since after a few dismissals he acquires a bad character, whilst in London he may lose place after place and yet obtain others without difficulty.

Apart from this, moreover, the good results obtained in smaller towns are often attributed to the survival of formal Apprenticeship, which is still common in many of them, particularly in Scotland.

This contention is both right and wrong. The advantage of the small town lies less in the actual Apprenticeship than in the definite and systematic methods of teaching of which it is the outward and visible sign. In London trouble arises from a combination of causes—the wage-contract, uncontrolled migration, drifting from job to job, and so on—or, in other words, from absence of system. Many individuals are well taught, but there is no regular and careful control over all of them. Often they regard themselves as wage-earners rather than learners and so their training suffers still more. The disadvantage of London, therefore, lies less in the decline of a particular kind of method than in the absence of definite method of any kind, and it is further increased by the legacy of past neglect.

Thirdly, considerable expense is often involved in teaching a trade, and it is the best firms who are most affected in this way. High rents and rates render bench room costly and valuable, and apprentices or learners who are producing little displace the skilled mechanic, whilst in London they can command a comparatively high rate of wage. When there is plenty of simple work available to which they can be put for the first year or two, their employment is still profitable. But in many trades this is now done by machinery, and so they are a cause of expense rather than of profit and are "more trouble than they are worth." Employers as a rule "want men, not boys," and can usually get them. So few are taken as definite learners and the rest have to pick up a trade as best they can.

Together, therefore, these causes combine to render London employers more or less averse to the engagement of boys for the purpose of training them. Instead, they have come to a great extent to rely upon and to prefer the provincial supply of labour. Indeed, just in the proportion that Londoners are difficult to teach and control, have

they been led to organize and develop it. Moreover, this supply is likely in any case to be large. Not only do men of ability and ambition tend to reach London, but in some country towns more boys are taken into certain industries than can be provided for locally. For instance, lack of good openings in agriculture may cause too many to enter the Building and Furniture Trades in their neighbourhood, so that when they grow up some of them have to find employment elsewhere and usually go to a large town and particularly to London. The result is therefore that in many cases the employers actually find awaiting them an ample supply of the labour which they require.

The effect of the influx on individual trades may next be considered. It is found in almost every one, but in some far more than in others, according to whether both its main causes are in operation or only the first. Where methods of training do not put the Londoner at a disadvantage, the influx of ambitious or restless men is less marked, and they do not obtain so large a share of the better positions. Where the training is less good, the influx is greater, and often much greater. It is likely also to be larger where the trade is practised everywhere, less large where it is localized or confined to the bigger towns.

In Printing the training given in London is about the best available, and conditions generally favour the employment of apprentices. The refusal to allow them in Newspaper Offices guards against the most dangerous form of specialization. Businesses doing jobbing and display work get a good variety of it, and the bigger London Offices get on the whole finer and more educative work than their provincial rivals. Care is also taken to teach boys thoroughly and to put them through all departments. Moreover, apprentices have to get full money as soon as they are out of their time, so that the boy from outside has not the same chance as in other trades of completing his education as an improver. The machine manager is even better off than the compositor owing to the elaborate and intricate machinery that is used; and the subsidiary branches are little

recruited from outside London. The same is true of some other industries. There are comparatively few provincially trained workmen among optical and scientific instrument makers. In the skilled processes of brushmaking better work and better teaching give the Londoner an advantage, and the high quality of London Saddlery excludes provincials from many parts of the trade.

Bookbinding, again, gets comparatively little of its labour from outside. The better class work is a separate branch here, and its quality confines it to Londoners. In jobbing, however, they have at most but a slight advantage, and it is in this that such influx as there is mainly takes place. Publishers' Bookbinding is semi-skilled work and does not offer any attraction to the abler men. Again, in the boot trade, with the high quality of the Bespoke work and the specialized factory industry, the position is much the same.

In metal-plate and art metal work, machine production has not been adopted to the same extent in London as in some other important centres; there has been much less substitution of juvenile for adult labour, and handwork has held its own far more completely. The process of stamping-out parts in tinplate work is confined to a few large firms, whilst in the art metal trades the chief trouble arises from the large number of shops with a highly specialized output. London, indeed, seems to get a larger share of the better class handwork than its rivals do. Similarly much brass-finishing in other places consists of the production of cheap articles, which is usually carried on by unskilled juvenile workers. In London it is mainly engineers' work of high quality and of varied character and requires skilled men, though even so there is a certain amount of low-skilled labour. In all these cases, however, whilst the provincial is hardly capable of competing directly with trained Londoners, complaint is made that London firms are undersold by the cheaper goods produced elsewhere.

The Engineering Trades themselves may now be considered. Their work in London consists largely of repairs or renewals, many of **them** large and important ones, and of

small varying orders, and hence it is to a great extent unspecialized. So the all-round fitter and turner is common, and men who are specialized on single machines are not numerous, except in a few large shops, whilst some little firms get chiefly such a succession of small odd jobs as does not give sufficient insight into the trade as a whole. London, therefore, requires a special class of workmen different from that needed in big constructional centres : and this fact limits the influx from outside.

It is nevertheless considerable. In part it consists of men from small towns or from the numerous small firms in the big ones, whilst sea-going engineers often get temporary work in London in the intervals between voyages. Finally, the large amount and important character of the work done in the larger centres sometimes enables the workpeople to obtain a greater general knowledge of the trade and its principles and of the applications of science to it than is within reach of those whose work is mainly repairs ; and this fact has to be set against the advantages which the Londoner enjoys in other directions.

So far, therefore, the influx has usually been small, only occasionally considerable, and never preponderating, and this is true also of the Leather Trade, in which there is some interchange of labour between London and other places. Elsewhere matters are very different, more particularly in the Building, and Woodworking and Furniture, Industries, in which specialization, machine production, haphazard methods of engagement and teaching, and the expense involved have had a far greater effect. Hence, whilst exact returns as to how many of their men have learnt the trade elsewhere cannot be obtained, the number is undoubtedly considerable and the learners employed by London firms are proportionally few.

Joiners, cabinet makers and woodworkers of all kinds appear to be most affected. The chief exception is the Pianoforte Trade, which is practically self-supporting. A considerable number of boys are also found in the wholesale cabinet trade, but few in the better-class retail work, in

joinery or in coach and van building. In other branches, also, the influx is appreciable. The quarrying districts, in some of which excessive numbers of boys appear to be employed, send many masons to London. Even fewer London boys learn bricklaying. In painting the lower grades of workmen are mostly of local production, but only a few of the more highly skilled decorators learn their business here. Finally in upholstery there is much specialization of output, and once again the better firms mainly recruit their labour from elsewhere.

Plumbing and plastering are exceptions to this general tendency, and in both the number of young workmen employed shows that the influx, even if considerable, is not very great. On the whole, the training given in them is less good in provincial than in London firms. In plumbing, the larger and heavier piping, that is found chiefly on the bigger buildings, provides the better work and in the number of large contracts London has a decided advantage. Little of the finer ornamental plastering is done in country shops. So the countryman seldom sees some of the best qualities of work and in plumbing London methods of teaching appear to be more regular than in other branches of the Building Trades. Hence the provincially trained workman is less sought after, at any rate in the best shops.

Thus the influx obviously varies with different industries. Large-scale and machine production often make it difficult to get all-round knowledge in a single firm. Irregular methods of learning and the absence of permanent engagement also have important effects. Where, therefore, all these causes are in operation at once, the immigration is very great, the more so as they cause employers to depend more and more on the outside supply. Where, however, they are not, it is much less, though the high average capacity of the provincial workmen ensures their presence to some extent in practically every trade. For even when the London training is better, this still enables them to make their way and establish themselves in a secure position.

These conclusions are supported by the evidence available

concerning the question as to whether the higher posts in London are filled mainly by men from other places. This point I attempted to verify and found that where there was a large influx, many, perhaps most, of the foremen had not learnt their business in London. This was most marked in Building and in the better class Furniture Trades, in which those who were Londoners had usually had some special opportunities, such as being themselves the sons of foremen. Where, however, the influx was not great, these conditions were reversed, and in Printing, and, to a lesser degree, in Engineering and Boilermaking, in the manufacture of Leather and in some smaller trades, foremen's jobs and similar posts were mostly filled by men who are Londoners both by birth and training.

The sources of the influx are not, as a rule, confined to any special area, and it is determined far more by the size and industrial character of towns and districts than by their situation. There are some exceptions. Masons come largely from the neighbourhoods of the quarries, engineers, for the special reasons already given, from big constructional centres in the North, and joiners from Scotland and the West of England. But usually the supply is provided mainly by small towns and country districts and not to any great extent by the big cities. These often have a similar, though smaller, immigration of their own and their workmen have less to gain by the move. A good many, moreover, naturally come in from the Home Counties, and apart from them those districts, which possess few large towns and numerous small ones, are likely to send the largest number.

Finally, this influx is partly inevitable and partly due to remediable causes. So far as it is due to the presence of abler men from elsewhere, it would be unwise and probably impossible to prevent it: and to this extent it is on the whole beneficial. No improvement in teaching can get rid of it, and the best men of another place have necessarily some advantage in competition with the average Londoner. To prohibit them, therefore, from utilizing the oppor-

tunities which London offers is a policy that could hardly be defended seriously. But apart from this, everything possible must be done to give the Londoner chances equal to those enjoyed by his rivals. For the latter often have advantages over men of equal or greater abilities, and these can be reduced or even in time removed.

The preventable disadvantages under which the London boy labours have already been classified under the three headings of organization, method and expense. First, shops which give a good all-round training may lack quality and variety of work, and big shops may from no fault of their own find numerous difficulties in their way, particularly in teaching the simpler rudiments of a trade. Thus each class of business is often well fitted to do a part of what is required, but not the whole. Here two remedies are available. First, the Trade Schools can help to provide what the workshop cannot, "giving an insight" into the work that is taken over by machinery in large shops or in other cases helping a boy to learn the better qualities. Secondly, where the smaller shops can teach the rudiments but not the finer work, and the large ones the finer work but not the rudiments, employment in each in turn could be provided for, first for three or four years in a small firm and then for a further period after transference to a larger one. To some extent this is done already and the difficulties of extending it are not insuperable. Indeed, the practice might in time grow into an organized system of Short Apprenticeships followed by Migration.

Defective methods of teaching present even more obvious opportunities for improvement, and here perhaps the greatest need is for systematic care and control of the individual boy. When the right boys are put into the right jobs, employers have more incentive to take trouble over them, failures are fewer and the demand for learners is stimulated : and where an employer can be assured of competent ones, it is worth his while to regularize their conditions of employment and even to take more of them. This in turn will make it possible to reduce the number of those who pick

up their trades casually, a result which can also be promoted directly by increasing the number of regular engagements and, where this is impossible, controlling their movements from firm to firm. Further, their needs as learners must be kept clearly before them, so that their future prospects shall not be sacrificed to immediate high wages. In another direction, also, there are ample opportunities for improvement in the provision of increased facilities for trade teaching.

Finally, the expense involved in teaching is less susceptible to direct attack, but anything that improves the character and conduct of the boys renders them more profitable to their employers, and makes it more worth their while to engage and teach them or to promote more frequently the most capable of their boy labourers: and so this difficulty will to some extent be overcome.

Above all, anything that reduces the expense of teaching or improves the character and conduct of London boys will check the tendency of employers to look elsewhere for their younger workmen. At present, as in the past, their reasons for doing this are probably adequate, but a general improvement in the supply of labour would remove much both of the need and of the justification. Something has already been done and much will depend on the success of the Labour Exchanges in supplying them with better lads than they have hitherto been able to get. If they can fill situations with the right sort, they can appeal with the best of all arguments—that of good business—and the employers will be quick to respond.

Indeed the question of dealing with the influx raises again the whole wide problem of Industrial Training, except that, generally speaking, it affects only the skilled trades, since with some exceptions semi-skilled and unskilled processes do not exercise the same attraction. To sum up, therefore, part of this influx is inevitable so far as it is due to the presence of abler men who desire to better themselves. Partly it is avoidable, and provincial workmen now get a greater advantage than their abilities alone would warrant.

But industrial and educational handicaps can be removed slowly but surely till the men of London and of the provinces compete on equal terms ; and then the latter will only succeed, if at all, by superior capacity.

## CHAPTER XV.

### THE PROBLEMS OF BOY LABOUR.

- (a) THE BLIND ALLEY.
- (b) THE PARTIAL BLIND ALLEY.
- (c) WASTEFUL RECRUITING OF TRADES AND OCCUPATIONS.
- (d) CONCLUDING SUMMARY.

**Real Meaning of Boy Labour**—Various senses in which it is used : jobs which only last during boyhood (Blind Alleys), failure to acquire a permanent occupation—The Blind Alley Character—Danger of latter greatest in Unskilled Work—Bulk of Boys under fifteen in Blind Alley jobs—Illustration—Steady increase in number of learners after fifteen—Nature of chief Blind Alleys—Position of Junior Clerks and Office Boys.

(a) *The Blind Alleys*—Their varied character and origin—Messenger Work—In the Post Office, under the old conditions—The Reorganization there—Shop Boys : in large and small businesses—Factory errand boys : their superior prospects—Office Boys—Vanguards—Productive Blind Alleys—Sections of a Trade carried out by Juvenile Labour—Instances—Trades, the whole of which are mainly so carried out—Extent of the Excess in them—Improvers' Blind Alleys—Their Causes—Real Crux of Blind Alley Work.

Directly Injurious Conditions of Labour—Street Trading—Indoor and Outdoor Work—Rarity of Ordinary Seasonal or Cyclical Irregularity of Employment—Monotony of much Indoor Work—Influence of absence of Aim or Object in Blind Alley Work.

Real Evil of Blind Alley springs from creation of type of character or conduct—Influence of this on the Employer—And on the Boy—Rough Character of Boys—Tendency of Conditions to conceal the fact that a surplus of boys is being employed—Tendency to increase gap between Juvenile and Adult Labour—Similarity of and Differences between Total and Partial Blind Alleys.

(b) *The Partial Blind Alley.*—Usually a Skilled Trade—Problems Peculiar to it—Two species of Partial Blind Alley—In Following-Up—Proper Proportion of Boys to Men—Leather-Splitting—Wire-Weaving—Rivetting of Boilers—Dual Character of the Surplus—Its Special Difficulties—Plumbing and Smithing—Their Special Problems—Second Species—Trades employing a Moderate Surplus of Boys for a variety of reasons—Illustrations from Woodworking Trades—Contradictory Character of Statistical Evidence—Reasons for this—Causes of the Excess—Processes or Jobs Reserved for Boys—Their Employment by Small Masters or Sub-Contractors—Employment of Boy Labourers in addition to Learners.

The Partial escapes some of the evils of the Total Blind Alley—It Creates Special Problems of its own, which require a definite organization.

(c) *Wasteful Recruiting of Trades and Occupations.*—Surplus of Boys, not Required by the Nature of a Trade, may grow up through Numerous Failures to Learn it properly—Meaning of Wasteful Recruiting—Its Causes—Wrong Choice of Trade or Situation—Leaving of One Trade for another—Its Frequency—It may be the Result of Unemployment—Influence of Defective Training—Sacrifice of Prospects to Immediate Wages—Failure of those in Unskilled Jobs about a Trade to Utilize their chances—Summary.

The Reserve of Boy Labour—How Composed—An Educational, not an Industrial, Reserve—The Reserve (Industrial) of Adult Casual Labour described—Comparison with it of Reserve of Boy Labour—Hypothetical Illustration of Latter—Its Comparative Smallness—Its Presence in Blind Alley Employments—Its Composition: (i) Those who drop out altogether; (ii) Casually Employed Mechanics; (iii) Specialized Mechanics Employed Regularly for Part of the Year; (iv) Mechanics Regularly Employed at a Low Rate of Wage—Indirect Effect of Reserve in Encouraging Irregular Methods of Employment—Summary of Its Results—Effect on it of Provincial Influx—Comparison of its Results in Skilled Trades and in Boy Labouring.

(d) *Concluding Summary.*

WHEN it is spoken of in relation to Industrial Training, the term Boy Labour is used primarily in contrast to adult labour and means, therefore, such as only lasts through boyhood or youth and comes to an end in early manhood. The boy labourer, in short, is distinguished from the boy learner in this, that the latter acquires gradually the trade or occupation at which he will continue to work as a man;

and the former, on reaching manhood, has to leave the job in which he has been engaged—or rather it leaves him—and find another. Thus the most salient characteristic of Boy Labour is this gap or hiatus between work in youth and in manhood which is involved in the shifting out of one thing into another of a different kind. The change usually has to be made about the age of eighteen, though sometimes it comes later, and at others as early as sixteen. But, sooner or later, it is inevitable.

As noted in an earlier chapter, the phrase has to be used in more than one sense. First in certain employments the work of boys is divorced entirely from that of men because they only employ, and are only fit to employ, boys. Of necessity, therefore, those who are engaged in them have sooner or later to find some fresh occupation, and so these jobs are more definitely and obviously Boy Labour than others. They are aptly described as Blind Alleys. Normally they not only fail to lead, but are not expected to lead, to permanent engagements, and by their very nature it is impossible that they should. Others, again, give a definite livelihood to some only of their boys, and compel the rest to make a change. They may be known as Partial Blind Alleys. In this sense, therefore, Boy Labour may be described as such as continues through boyhood and youth, but no longer.

The Problem, however, is not limited to this, but covers all cases of lack of success in acquiring a permanent place in industry. Hence Boy Labour denotes also the failure of a boy's work to qualify him for any kind of occupation, and in this sense the skilled trades have their own problem. It is not that they cannot provide employment for their boys, for usually they are able to do so. But under modern conditions the number of failures in them is so great as to constitute a third form of Boy Labour in the Wasteful Recruiting of Trades and Occupations. In other words, with education as with physical nourishment, there can be malnutrition as well as want of nutrition. Thus the questions involved are concerned not merely with those

jobs which lead nowhere, but with all cases of failure to acquire an occupation, whether from lack of opportunity or inability to utilize it. Among them must be included such partial failures as produce inferior workmen. This secondary meaning of the term, therefore, perhaps signifies best the whole of the problem.

Nevertheless, the first of its three forms, the Blind Alleys, pure and simple, may be described as Boy Labour *par excellence*, since they are boys' jobs and nothing more. After adolescence they fail necessarily as a means of livelihood; and both they and the Partial Blind Alleys differ from Wasteful Recruiting in the fact that with the latter some defect or mistake is required to produce failure, and with the two former such is almost inevitable in many cases, unless definite steps are taken to avert it.

Moreover, Boy Labour of any kind produces its effect not only from the nature of the employment itself, but from the type of industrial character which it creates. In short, there is not only Blind Alley work, but the Blind Alley character as well. If a permanent livelihood is to be found in manhood, a job must not only lead to a definite occupation, but must fit a person to fill one. In other words, it must bring him up as a steady, regular and disciplined workman. This, indeed, is the crux of the whole matter. It is less important that a boy's work should lead direct to a man's work, than that it should prepare him properly for it. If it does, the shifting should not be difficult when the right time comes. The great evil of Boy Labour is that it produces a type of character, which unfits him for it, and tends to make him casual and undisciplined and lacking in steadiness and perseverance. This is true of all its forms, and of all kinds of employment, whether skilled or not, though it is more marked in some trades than in others, with vanguards, errand boys and rivet boys, for instance, than with the Post Office messenger.

The danger, however, is far greater in the Blind Alley than in a skilled trade. The boy needs, it is true, to grow up steady and disciplined in the latter no less than in the

former. But the learner is more under control, has a more definite objective and will have his skill to fall back upon. To the boy labourer of the Blind Alley, his steadiness and regularity are likely to be his all. Hence we have to face not only the problem of the Blind Alley trade, but the derived one of the Blind Alley character in all trades.

An occupation, therefore, must not be classed as boy labour simply because it does not lead to skilled work, but only when it fails to fit a lad for any kind of employment at all. For under modern conditions many workmen must go, and continue to go, into low-skilled jobs. Moreover, the work of many Blind Alleys has to be carried out and to be carried out by boys. If, therefore, they are to work at all, a great many have to do it and for not a few, particularly between fourteen and sixteen, it is the only thing they can get. Without such work there would not be enough jobs to go round. The recent Census, for instance, returned 21,366 boys between fourteen and fifteen as engaged in occupations in the County of London and 33,174<sup>1</sup> in the Urban Districts of Greater London. Of these the two chief Blind Alleys, those of Vanguards and Messengers,<sup>2</sup> and Junior Clerks and Office Boys, whose work often reveals traces of a Blind Alley nature, account for nearly 12,000, and over 17,000 respectively. On the other hand, comparatively few are employed between these ages in the chief skilled trades. This may be illustrated by the following table :—

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<sup>1</sup> Estimated by the method described in Chapter I.

<sup>2</sup> The Census heading is Messengers, Porters, Watchmen (not Railway or Government). Railway messengers are not separately returned and with the changes in the Post Office the work of the chief class of Government messengers has ceased to be a Blind Alley, and they also are excluded from the table.

BOYS AGED 14-15 (AS RETURNED IN THE CENSUS OF 1911).

| Boys' Jobs and Blind Alleys.       |                   |                 | Selected Skilled Trades.                  |                   |                 |
|------------------------------------|-------------------|-----------------|---|-------------------|-----------------|
|                                    | County of London. | Greater London. |   | County of London. | Greater London. |
| Junior Clerks and Office Boys. . . | 1,563             | 2,457           | Fitters and Turners . . . .               | 26                | 50              |
| Vanguards and Junior Carmen        | 1,475             | 1,923           | Blacksmiths . .                           | 18                | 42              |
| Messengers and Porters . . .       | 8,848             | 13,175          | Electrical Apparatus Makers .             | 217               | 378             |
|                                    |                   |                 | Precious Metal and Instrument Trades. . . | 345               | 528             |
|                                    |                   |                 | Carpenters and Joiners . . .              | 59                | 110             |
|                                    |                   |                 | Plumbers . . .                            | 58                | 109             |
|                                    |                   |                 | Cabinet Makers .                          | 143               | 215             |
|                                    |                   |                 | Upholsterers .                            | 43                | 61              |
|                                    |                   |                 | Printers and Lithographers                | 731               | 1,130           |
|                                    |                   |                 | Bookbinders. .                            | 72                | 93              |
| Total . . .                        | 11,886            | 17,555          | Total . . .                               | 1,712             | 2,716           |

After fifteen or at least sixteen the excess of boys employed in the chief Blind Alley jobs diminishes rapidly, whilst the numbers in skilled work and in clerical employment steadily increase. This will appear from the following table, giving the total engaged in these groups for each year from fourteen to seventeen, and for purposes of comparison between nineteen and twenty, and their percentage of all occupied males at these ages.

<sup>1</sup> In most cases labourers are included, as they are not given separately in the Census. Probably their numbers are not large.

## BOYS AT VARIOUS AGES (CENSUS OF 1911).

|                               | 14-15.            |                 | 15-16.            |                 | 16-17.            |                 | 19-20.            |                 |
|-------------------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
|                               | County of London. | Greater London. | County of London. | Greater London. | County of London. | Greater London. | County of London. | Greater London. |
| All occupied . . . .          | 21,366            | 33,174          | 31,935            | 49,246          | 34,525            | 53,675          | 36,771            | 56,026          |
| Chief Blind Alley Jobs        | 10,321            | 15,098          | 10,909            | 15,608          | 8,005             | 11,169          | 3,251             | 4,190           |
| Clerical Labour . . .         | 1,563             | 2,457           | 3,714             | 5,879           | 4,956             | 8,140           | 5,617             | 8,989           |
| Selected Skilled Trades       | 1,712             | 2,716           | 3,157             | 4,848           | 3,733             | 5,753           | 4,086             | 6,097           |
| Percentage of Total Occupied— |                   |                 |                   |                 |                   |                 |                   |                 |
| Chief Blind Alleys.           | 48.3              | 45.5            | 34.2              | 31.7            | 23.2              | 20.8            | 8.8               | 7.5             |
| Clerical . . . .              | 7.3               | 7.4             | 10.6              | 11.9            | 14.4              | 15.2            | 15.3              | 16.0            |
| Selected Skilled Trades . . . | 8.0               | 8.2             | 9.9               | 9.8             | 10.8              | 10.7            | 11.1              | 10.9            |

Thus in the Blind Alleys the excess after fifteen continues for a time to be considerable, but is much less marked, and the proportion in them of all the boys employed is less than half between sixteen and seventeen of what it was between fourteen and fifteen. In the earlier years the gross excess is far greater with messengers than with vanguards, but it must be remembered that some of the former are in positions which will be practically permanent if they show sufficient capacity, or in which they will have a good chance of working their way up. The messenger's job, moreover, fails him sooner than that of the vanguard. The actual number of the former falls rapidly after sixteen, and begins to decline after fifteen. It is not till after seventeen that a diminution begins among the latter. There is a similar tendency in other jobs of this class, and in Rivetting, for instance, many leave the trade at, or just after, sixteen.

On the other hand, the selected skilled trades show a regular increase typical of all work of this kind, and employ nearly 11 per cent. of the total between sixteen and seventeen as against just over 8 per cent. between fourteen and fifteen. Similarly clerical workers more than trebled their numbers and nearly doubled their percentages between fifteen and seventeen. For many boys, therefore, it is

<sup>1</sup> Including labourers, when they are not separately specified.

obvious that employment in unskilled boy labour is only necessary as a temporary resort between fourteen and fifteen till they can find better places or reach an age at which employers who have such to offer are prepared to take them on.

Before leaving the matter, a word must be said as to the character of the junior clerical jobs. The returns suggest a deficiency rather than an excess of boys, which would lead to the conclusion that they are the antithesis of boy labour. On the other hand, there is little doubt that there are not a few firms which offer little or no prospect, so that as far as they are concerned the work is a Blind Alley. Moreover, it often gives little steadiness and discipline, and leads to much irregular movement from firm to firm, and so produces the Blind Alley character. It is necessary to reconcile, therefore, this deficiency of boys, taking the occupation as a whole, with the presence of a certain amount of Blind Alley employment in it.

In the first place, it is probable that many office boys will have been classed in the Census as messengers and not as clerks. Secondly, the employment is largely recruited from those who do not start work till sixteen, seventeen, or later, or from other older persons. Places, therefore, are not filled directly from the younger boys, and some of them may be dismissed at the same time that vacancies in the same firms are being filled from other sources. Thirdly, junior clerks in the bigger businesses often get an excellent chance of promotion, but in the smaller ones they are bound to be dismissed sooner or later, and often cannot get taken on elsewhere. Frequently, indeed, the lower grade of office boy is found not to be suitable for promotion. A good many, therefore, have to transfer themselves to something else.

### I. THE BLIND ALLEY.

It is now possible to consider in more detail the different forms of Boy Labour and a commencement may be made with the Blind Alleys. These originate in various ways.

First there are those branches of the work of a skilled trade which are set apart to be performed entirely by boys and girls, such as the working of semi-automatic machines. Secondly, there is a considerable amount of unskilled factory labour which is mainly carried out by them. Thirdly, there are those employed in errands and messages, in portage, in warehouse work and in various branches of general labour. Blind Alley Occupations, therefore, include a few jobs that require a large number of boys, and many more that only employ a few each, and we may begin by considering the effect of each class upon those who enter it.

That of shop, errand and messenger boys is a very heterogeneous one, and the conditions under which they are employed are correspondingly varied. Previous to the changes of the last few years the work of the telegraph messenger in the Post Office was a very marked Blind Alley indeed. The pay was fair and included a uniform. The boys were kept under some discipline and control. The hours, though apt to be irregular and spasmodically long, were on the average short. As a purely temporary job, therefore, it had many advantages, and had the recommendation that it kept boys in the open air and improved their health, and that it smartened them up generally and kept them under some discipline.<sup>1</sup> On the other hand, only a very small proportion used to be absorbed in the regular service, and thousands had to be dismissed annually. Hence, though in some respects of a superior kind, the job was in many ways typical of Blind Alleys generally.

Recently, however, pressure has been put on the authorities to re-organize the work. As a result the boys are employed as messengers for a longer period. In this and other ways the numbers required have been reduced, and the openings for permanent employment have been in-

<sup>1</sup> See the First Report of the Standing Committee on Boy Labour in the Post Office. "Whilst the more or less intermittent nature of a messenger boy's work and its lack of any directly educational influence no doubt tend to reduce, they do not destroy the value of the strict discipline and physical training under which the lads pass their service."

creased. Already those whom it is necessary to discharge annually for lack of prospects have been reduced to a few hundreds, and it is hoped that in a few years permanent vacancies will be available for all who possess sufficient capacity and who wish to stay in the service of the Post Office.<sup>1</sup> Some of the large Messenger Companies and such-like bodies also provide good general conditions for those they employ, similar to, and sometimes rather better than, were given by the Post Office, previous to the reorganization. The same is true of Railway Bookstall boys, except that the hours are usually longer.

With shop boys the position varies considerably. In large firms some at least get the opportunity to work their way up; the work itself is often interesting, even if it is not skilled, and they are well controlled by the heads of their departments. At its worst, therefore, such employment is not actively harmful. The best boys get promotion and the less able are at least kept steadily at it. In smaller businesses, however, conditions are not nearly so good, and with the little shopkeeper who employs only a single errand boy, there are no prospects at all. The lads are not kept under much control, many of them spend most of their time knocking about the streets, and their hours are often extremely long.

Thirdly, there are the boys employed on the errands, and in making themselves generally useful, about factories and workshops. This is mainly indoor work, and involves less danger of getting on the streets, and where they are occupied in serving and helping the men, there is some variety about it. In many cases, no doubt, there is no chance to rise, but in others the job is not really a Blind Alley at all. Smart lads are promoted to the bench, and many firms at the present time take their boys first of all on trial in this capacity for six months or a year before putting them to the trade. For this often provides a better test of their suit-

<sup>1</sup> For a fuller description of these changes, see Appendix V, "The Telegraph Messenger and the Vanboy."

ability than can otherwise be secured. Frequently it is a boy's own fault if promotion does not follow ; and the dismissal of many is due to bad conduct or lack of capacity. Even among messengers alone, therefore, prospects differ very widely indeed, and their case has been treated in some detail to show the care that must be taken before writing down any particular job as entirely a Blind Alley.

The position of the Office Boy and Junior Clerk has already been dealt with. It has been pointed out that a great many of this class have excellent prospects of permanent employment, advancement being sure, if slow. In the smaller firms, on the other hand, and especially in the smallest ones which perhaps have only an office boy and no clerks, promotion is often practically impossible, and boys come and go in the most haphazard way. The employment, therefore, is a Blind Alley, at least so far as the particular firm is concerned, and though sometimes openings can be found elsewhere with comparative ease, this is not always the case. Hence the job is a blind alley in these cases, though not in the sense that promotion anywhere within the business is practically impossible. Thus in many respects the work should be classed rather as a Partial than as a Total Blind Alley.

Conditions, however, are most unfavourable with the vanboys or, as they are called, vanguards, though their prospects are rather better than those of some kinds of shop boys. Hours, which are those of the carmen, are long, often unreasonably so, and render attendance at evening schools impossible. The boy is exposed to a marked degree to the temptations of the streets. His work demands little intelligence or sustained effort, and is apt to breed careless and lazy habits. With some exceptions the chances of promotion are not many, and before the increases in wages obtained in 1911, the job offered no such attractions as would induce boys to stay in it. The Railway Companies, it is true, succeed in providing for all of their vanguards in other departments of their work, as do some other large

employers. Elsewhere, however, a great many have to seek fresh occupations.<sup>1</sup>

Finally, there are the Productive Blind Alleys, that is to say, those forms or processes of manufacture which employ mainly boys. Their extent varies. Where only particular processes or jobs are affected, the result may be to give the trade as a whole a comparatively small surplus of Boy Labour and constitute it a Partial, but not a Total, Blind Alley, and such will be more fully considered later. The Productive Blind Alley proper is found where certain sections of an industry, or even whole trades, are carried out mainly by juvenile labour.

Typical instances of such sections of a skilled trade are not difficult to find. In brushmaking, except in some smaller firms, the work of boring is carried out entirely by girls, whilst skilled men are still required for the "Pan and Hair" process. In tinsmithing, also, and in the cheaper lines of silverware, some large businesses have all the parts prepared by boys, and the only skilled men engaged are the solderers who fit them together. Makers of engineers' accessories and parts, again, often rely largely upon juvenile labour, and in the manufacture of light leather certain departments are almost entirely given up to it.<sup>2</sup> Finally in brass finishing the work appears to be done mainly in this way in Birmingham, but less frequently so in London, owing to its more varied character and, as a rule, its better quality.

Lastly, there are those trades in which the work consists in great part of unskilled juvenile labour. Most of them individually are small, but together they employ a considerable surplus of boys. Below are given the numbers engaged in them in the County of London at different ages, as returned by the Census of 1901.<sup>3</sup> The figures in the first

<sup>1</sup> See also Appendix V, "The Telegraph Messenger and the Vanboy," and the recent Report of the Departmental Committee of the Home Office on the Labour of Van and Warehouse Boys.

<sup>2</sup> See Chapter VIII.

<sup>3</sup> The returns for this census are quoted as the Census of 1911

table are the average number employed in each age group for each year of age <sup>1</sup>:—

| Trade<br>(figures in brackets represent<br>total employed in trade). | 14-15<br>Number. | 15-19<br>Av. No. | 20-24<br>Av. No. | 25-34<br>Av. No. | 35-44<br>Av. No. |
|--|------------------|------------------|------------------|------------------|------------------|
| Leaden and Zinc Goods (1,357)  | 46               | 54               | 29               | 30               | 27               |
| Dye, Ink, Paint, etc., Makers,<br>(1,382)                            | 27               | 49               | 35               | 33               | 27               |
| Cartridge, Fireworks and<br>Matches . . . . . (1,968)                | 120              | 100              | 67               | 50               | 29               |
| Candles and Soap . . . . . (1,383)                                   | 40               | 53               | 36               | 31               | 26               |
| Paper and Stationery Manu-<br>facture . . . . . (6,489)              | 219              | 264              | 188              | 166              | 107              |
| Rope Making . . . . . (882)  | 40               | 39               | 17               | 14               | 10               |
| Jam and Chocolate . . . . . (1,243)                                  | 34               | 49               | 37               | 32               | 22               |
| General Factory Labour and<br>Other Workers. . . . . (7,184)         | 195              | 308              | 241              | 157              | 126              |
|  | 721              | 916              | 651              | 514              | 374              |

The total numbers employed in each age group were :—

|       |       |
|-------|-------|
| 14-15 | 721   |
| 15-19 | 4,581 |
| 20-24 | 3,255 |
| 25-34 | 5,138 |
| 35-44 | 3,745 |

The surplus of youthful labour will perhaps be brought out best by a comparison with the annual average of all occupied at different ages in London and in the whole of England and Wales. The numbers are given as percentages of those employed between twenty and twenty-four.

does not give separate figures for all the trades concerned. In the earlier one separate returns are only given for the County of London. In those for which information is available, the recent census shows on the whole a less marked excess than that of 1901, but still a considerable one.

<sup>1</sup> That is to say, from fifteen to nineteen is a period of five years. The number given is one-fifth of the total in this group, from twenty-five to thirty-four is ten years, and the number taken is one-tenth of this.

|       | Unskilled<br>Blind<br>Alley<br>Trades.<br>London. | All Occupied<br>Males.<br>London. | All occupied<br>Males.<br>England and<br>Wales. | Percentage.<br>Excess (+) or<br>Deficiency (—)<br>of these trades<br>compared with |                       |
|-------|---|-----------------------------------|---|--|-----------------------|
|       |   |                                   |   | London.  | England<br>and Wales. |
| 14-15 | 110   | 60 (58) <sup>1</sup>              | 76 (76) <sup>1</sup>                            | +83·3  | +44·7                 |
| 15-19 | 140   | 90 (95) <sup>1</sup>              | 103 (103) <sup>1</sup>                          | +55·6  | +35·9                 |
| 20-24 | 100   | 100 (100) <sup>1</sup>            | 100 (100) <sup>1</sup>                          | —  | —                     |
| 25-34 | 79  | 87 (97) <sup>1</sup>              | 85 (95) <sup>1</sup>                            | - 9·2  | - 7·1                 |
| 35-44 | 57  | 65 (79) <sup>1</sup>              | 66 (78) <sup>1</sup>                            | -12·3  | -13·6                 |

This shows a very considerable excess of boys and youths in these trades between the ages of fourteen and twenty, which may be further illustrated in another way. If we compare those actually employed from fourteen to twenty with those who would be if the proportions were the same as for the whole of London, we should get the following results :—

|           | Actual Number<br>Employed. | Normal Number<br>Employed in pro-<br>portion to those in<br>Age Group 20-24. | Excess. |
|-----------|----------------------------|--|---------|
| 14-15     | 722                        | 395  | 327     |
| 15-19     | 4,606                      | 2,965  | 1,641   |
| Total . . | 5,328                      | 3,360  | 1,968   |

These figures suggest, therefore, that something like one-third of the boys in these employments cannot in any case remain permanently in them. It may be said, however, that in them there is no such marked provincial influx as there is in the skilled trades, but even in comparison with the whole of England and Wales there was an excess of nearly 1,500 or more than one-quarter of the whole.

Moreover, allowance must be made for the fact that the

<sup>1</sup> Figures in brackets are those shown by the Census of 1911.

men in these industries may not be recruited entirely or even mainly from those who enter them as boys. It sometimes happens that youths and young men of from eighteen to twenty-two are not much in demand, and that older men are required. Hence a definite break and change in employment is necessitated. Even where this is not so, many boys do not stay continuously at one kind of work until manhood, and one of the great difficulties arises out of their failure to stick to their jobs. Hence the number for whom they are likely to prove a Blind Alley is apt to be far greater than the actual surplus of those employed. For not only do those for whom there is not room have to leave at the close of adolescence, but many for whom there is do so also or pass continually in and out of them.

Finally, there are certain kinds of improvers' work, which clearly display the character of a Blind Alley. They are found in certain skilled trades and need such an amount of knowledge and capacity as a youth with a year or two's experience will possess, and pay wages in proportion. Now as a general rule improvers can hope to go on to better and better work till they have made themselves tradesmen. In these cases they seldom or never do. The job teaches little or nothing new, and those engaged on it never get more than a youth's money, or at best that of a low-skilled man, and as a rule they leave the trade. Such jobs, therefore, may rightly be described as Improvers' Blind Alleys. They continue to give employment somewhat longer than those previously described, usually up to twenty-two or twenty-three, but then they fail just as the ordinary Blind Alley does. A few instances may be given. In machine cabinet-making the commonest work is "knocked together" by improvers, to whom it gives neither training nor permanent employment that is worth keeping. The Chipping-Up or rough-toning of pianos is likewise done by youths, who have to leave the trade unless they can rise to be tuners, which is not possible for all of them.

Whilst, therefore, the characteristics of Blind Alley jobs differ in detail, their general results are much the same, in

that they leave a youth on the threshold of manhood without trade or occupation. Moreover, since Boy Labour in them is interchangeable to a great extent, the actual excess in particular cases is not their most important feature. The decisive factor is that as a whole they use far more lads than they can find permanent employment for, and are therefore liable to lead them nowhere, as under our present haphazard organization they frequently do. Thus what is necessary is to provide that after they come to an end there shall be something definite to follow.

In addition to this, they display a general tendency to create what I have called the Blind Alley character, and certain dangerous or injurious conditions attach to some of them. These last are, on the whole, less marked in the more regular indoor employments and in the work of the Post Office than in a great deal of outdoor and distributive work.

A few have a definitely bad influence, morally as well as industrially. In the case of the selling of newspapers in the streets it is often difficult to get back into regular habits of work boys who have spent any considerable time at it. Sale of betting news makes them gamblers, the work itself is apt to create irregular, loafing habits, and the proportion of petty criminals among them is larger than in any other boys' job. Other forms of street trading, but not all of them, are almost equally injurious, and many of the hair-dressers' lather boys come under similar bad influences. Vanguard, again, suffer from long hours and absence of sustained effort.

Perhaps the most frequent and most serious trouble arises in the case of those who are always about the streets and not employed steadily indoors. In some of the cases just mentioned this is especially acute, but many shop and errand boys are also exposed to it. Factory lads, indeed, often spend some time outside delivering goods or messages or fetching materials, but, as a rule, are mainly within. In any case they appear to be more strictly controlled, and to come less under the injurious influences of the streets.

Upon those who are always about them, the evil shows itself in many ways. The boy is apt to get roving and unsettled habits, and a dislike of steady and regular industry, he loses all sense of responsibility, and in the worst cases develops into a casual, not only by habit but by preference. That careful control by the employer can obviate such results seems to follow from the cases of the Post Office Telegraph boys, the District Messengers, and a few others.

The worst of all is, perhaps, that lads come to shift continually from job to job. Sensational cases are best avoided, but for this to be done twice or even thrice a year is by no means uncommon, and the danger of unemployment grows in proportion. Such shifting, moreover, enormously increases the difficulty of fitting them for future life. For those who stay in one place, or only change occasionally, a great deal can be done because they are at least accustomed to work steadily, but for those who never stay long anywhere, little or nothing is possible. So, too, an employer has some inducement to promote the former; he is not likely to have either the will or the power in the case of the latter.

Except with rivet boys in boilermaking and one or two other classes, ordinary irregularity of engagement and employment is not common in the Blind Alleys, and far less so than with improvers in the skilled trades. Low-skilled factory labour is often comparatively steady. The work of errand boys, again, usually does not vary as much as that of men, since as a rule nearly as many are required for busy as for slack seasons. A far more potent cause of the irregularity is to be found in the restlessness of the lad himself. His work is easy to get and as easy to change. Hence there is little to keep him in a particular place, and he leaves upon any small pretext or upon none at all. As a result, employers have no inducement to regularize their boys' work, and every temptation to employ them temporarily and put them off as soon as business declines. Even so, however, it is only a certain proportion of the firms who

do this, and such irregularities are small in comparison with those caused entirely by the boys themselves.

Finally many Blind Alleys, and not least those carried on inside a factory, suffer from their failure, not merely to teach anything, but even to exercise the full capacities of those they employ, especially where the work is both hard and monotonous. The boy not only learns nothing new, but is apt to lose what he has learnt already. Matters are rendered worse than they otherwise would be because such jobs are usually taken without aim or object beyond the immediate earnings. So their monotony is increased when there is nothing to look forward to, and their evil influence accentuated where there is no interest in them or in preparation for something better. Definite aims and ambitions are absent, and their absence causes many to fail to fit themselves for adult life, and sometimes never even to give themselves the chance.

Blind Alley employment, therefore, leads to its worst and most far-reaching results not so much by producing specific evils as by creating a type of character and conduct, and this it is apt to do for one reason or another in almost every kind of Blind Alley. A job itself may give some discipline and control, but the boy, being in a position of no responsibility, does not profit by it. Moreover, no one has any further duties towards him than to see that he earns his wages. With learners and apprentices there is some obligation to teach which only the worst employers evade. But the boy in the Blind Alley is simply a wage-earner paid a certain rate, and is replaced if he does not earn it, and the employer's influence for good is minimized.

This, again, reacts upon the boy. Apart from seeing that he does his work, he is nobody's business. He is left free to stay or go as he pleases, controlled only by fear of a "row" at home if he loses his job, and this fear causes some to stay on in a place long after they ought to have left it. Being treated as a worker, therefore, it is natural that what he can earn should become his first, and perhaps his only concern. Already liable to acquire casual habits, this new

influence makes him even more so. Work that is easy to obtain is as easy to leave, and so if he is restless, or lazy or inclined to loaf and frequent the streets, these bad tendencies are encouraged, and if he is not, he is liable to acquire them. No one place has any particular attraction to him, and so instead of a steady regular workman, he grows up at best a casual, or low-skilled labourer, without much steadiness, and at worst a man who "can do anything," which means nothing.

Moreover, the frequent complaint of employers that "the boys are a rough lot who do not want to be anything more than unskilled labourers," illustrates this in a significant way. Whether the absence of responsibility actually produces this characteristic, or whether it is simply that like attracts like, may be open to question ; but it is beyond dispute that employment of this kind keeps them not only from possessing any wider aims and ambitions, but even from applying themselves steadily and regularly to anything. It is in these ways that a Blind Alley trade breeds and multiplies the Blind Alley character.

Last of all, these conditions conceal from the employers the fact that they are using excessive numbers of boys. If the latter stuck steadily to their jobs, this would at once be obvious. When they are always coming and going, however, firms often experience difficulty in finding enough who are suitable, or sufficiently experienced, for promotion to the few openings they have available. Thus Mr. Cyril Jackson remarked in his Report to the Poor Law Commission on Boy Labour :

"There appears to be no doubt that the restlessness of many of the boys doing more or less unskilled work obscures from some employers the fact that they are using a greater number of boys than can evidently be employed in their trade as men. The employers who have filled up forms often state that they 'never discharge a boy who is willing to stay,' or that 'boys are only discharged for misconduct' when it is evident from the figures appearing in the same form that there must be a considerable number of boys passing out of the trade each year,"

Again, in my own experience, a firm of tinsmiths had their parts made by boys and soldered by the men, recruiting the latter from the former. Only a very few openings occurred, but even so it was difficult to fill them. Moreover, a further cause of trouble is that little or no time is given to employers to test a boy's suitability. The more capable ones are often as restless as any, and are gone before a chance of promotion, or even certain knowledge of their fitness for it, can be obtained.

Similarly, this restlessness increases what I have called the hiatus between juvenile and adult labour, or at least the separation becomes more clear than it otherwise would naturally be. The lad who sticks to his job sometimes fits himself for another that is allied to it, whilst the one who is always moving will not fit himself for anything; and if his employment should give him merely discipline, steadiness and application, these will stand him in good stead. Restless habits deprive him even of these qualities, and so increase still further the separation between his occupation in youth and manhood. For even in the Blind Alley there is some small amount of promotion of boys within a factory, either in the same or in other departments, and not quite all have necessarily to seek fresh employment.

So far as this is the case, the distinction between Total and Partial Blind Alleys is obliterated, but the differences between them outweigh the resemblances. The Blind Alley only provides a few with a permanent opening, the Partial Blind Alley finds room for a considerable number. Secondly, many of those engaged in the latter are in a position to learn a man's work in the course of their employment. In the former promotion depends on the employer making a place for them, as he usually tries to do if they show any capacity. Thirdly, in a Partial Blind Alley a boy remains in the same trade or job (the plumber's mate, for instance, becoming a plumber, the hammerman a smith, and so on), but in a Blind Alley he is usually transferred to a different one, working still for the same factory but in a new capacity.

A few instances may be given. Some printing and stereo-

typing offices employ many errand boys, of whom a proportion, varying perhaps from one quarter up to one half, are either put as apprentices<sup>1</sup> or raised to be clerks or, if less competent, provided for in semi-skilled work. Again, in the metal plate and art metal working, solderers are sometimes recruited from boys who are stamping-out. The case of the glue boys in joinery and cabinet shops is somewhat similar, but there are so few of them even in a large firm that a chance of promotion to the bench can nearly always be found for any capable lad. In all these instances, however, present conditions result in fewer boys rising in this way within the shop or office than the opportunities available would allow. They do not go direct to the better work, but will be transferred to it after some time at labouring, and for the various reasons already given they miss their chance.

## II. THE PARTIAL BLIND ALLEY.

Unlike the first, the second form of Boy Labour—the Partial Blind Alley—is, as a rule, a trade in the sense of requiring a high level of skill, and provides a natural opening for a good many of its boys; but there is always a larger or smaller proportion who have to seek other occupations, and for them the job is a Blind Alley. The problem, therefore, differs in many ways from that hitherto considered. Instead of a number whose employment must almost certainly fail them in early manhood, it is often impossible to say whether or not any particular one will or will not be permanently provided for. For, whilst every boy cannot learn the trade, every boy has his chance, and it is not possible to tell at the outset whether or not he is going to take it. In some ways, therefore, it is far more difficult to remove a lad in time to other work, and there is a danger that it will not be the right one who is removed. In a Total Blind Alley the change cannot very well be for the worse, in a Partial Blind Alley it very well may.

<sup>1</sup> The Indentures in these cases are usually dated back for one year.

Partial Blind Alleys fall into two groups—those where Following-Up prevails, and those which adopt other methods of training and for a variety of reasons get an excess of juvenile labour. In the former these characteristics arise naturally as a result of the number of boys or youths who are required to assist the men. In them the problem varies in character and extent from trade to trade, as already described.<sup>1</sup> Where each workman has one assistant he may be in every case a boy or youth, or he may sometimes be an adult and not a boy at all, and thirdly, the work may be done in squads with a smaller proportion of juvenile labour.

The right proportion of boys to men in a trade is not easy to determine, and varies, among other things, according to the greater or less rapidity of its development. In London as a whole at the recent Census occupied males under twenty were about one to six of those over that age,<sup>2</sup> and in skilled and semi-skilled employment the proportion was usually somewhat larger. Obviously, therefore, where it is one to one, there is a very large excess, and even where it is not more than one to three, an appreciable one.

Trade Union rules seldom or never allow more than one boy to three men, and permit frequently nothing like so many, not as the average throughout the trade, but as the maximum in any one shop. Hence even in industries like Printing, where firms have frequently as many or more than this the average is decidedly lower. Some still take few or none, and with compositors apprentices are not allowed in Newspaper 'Offices. Even so there are complaints of overstocking. The proportion of boys, indeed, is rather larger in one or two cases, but for this there are usually special reasons. Seagoing engineers, for instance, learn a large part of their business on shore, whilst the pianoforte factories train tuners not only for other parts of Great Britain, but for the Dominions and foreign countries.

With Following-Up, therefore, there is necessarily a

<sup>1</sup> See Chapter VI.

<sup>2</sup> Under twenty, 199,518; over twenty, 1,204,744.

larger or smaller surplus, except where many of the helpers are adult men. In Leather Splitting, probably from two-thirds to three-quarters of the assistants have to find other openings. These could, indeed, be provided in some factories either in semi-skilled processes like striking-out and machine-finishing, or in low-skilled work such as lime-jobbing. But whether the displaced splitters are actually absorbed in this way I was unable to discover definitely. Moreover, being engaged on this work between seventeen and twenty, their absorption outside the factory is often less easy than with a young boy. Again, in wire rope weaving, many of the "watchers-out" have to leave the trade, but as a rule they do so about sixteen, and in the largest firm those who are to be taught the business are usually selected for the purpose by this time. Or again, to take an instance from semi-skilled work, there are those sawmills which are confined to cutting the wood into lengths and widths, and in which every sawyer has a boy to "pull-out" for him.

These cases illustrate the state of affairs where there is one boy to each man. Boilermaking is, perhaps, most typical of their employment in larger squads. In some provincial centres apprentices are very numerous, but in London, except occasionally among the platers, the journeymen are recruited almost entirely from the rivet boys, who may rise in turn to be holders-up, rivetters and even eventually platers or angle-smiths. These latter openings slightly reduce the excess, whilst in large constructional firms, which in London are not numerous, the use of the hydraulic blast dispenses with the boy at the fire. On the other hand, several carriers are required to one squad in certain kinds of shipwork.

The surplus of boy labour in this trade has a double character. Each normal squad consists of one rivet-heater—a boy of from fourteen to sixteen—one rivet-carrier—an older youth—and three men—one holder-up and two rivetters. The carriers are recruited from the heaters and the men from the carriers. Hence not all the heaters can

find places as carriers, and at about sixteen some of them have to leave the trade, which is for them a Partial Blind Alley, terminating at this age.<sup>1</sup> Owing to the casual character of the work, however, more than are really needed stay on after sixteen. Still many do go to other work, and the excess after that age is correspondingly reduced. Indeed, it is sometimes held that once a boy is a carrier, his rise to be a holder-up or rivetter is assured, barring misconduct or incapacity. This is too favourable a view, and there is again an excess among the carriers just as there was among the younger boys. A few of those who are displaced appear to find some semi-skilled work, such as on the drilling machines.

If, however, the excess, either before or after sixteen, is comparatively small, the trade has some special drawbacks. The work in London consists almost entirely of repairs, though these are often on a very large scale. As such, it is casual and irregular and that of individual firms varies considerably, quite apart from the general state of business. Squads move from firm to firm, and their boys follow them, and often there is a reserve of the latter waiting round the gates of a yard on the chance of a rush. This is the reason why, apart from the necessary excess, there are more boys in this job competing for employment than are really required to do the work. Secondly, this is itself apt to unfit them for other things. Rough, dirty and irregular, it recruits many of its boys and especially those who are casually employed from a rough class, whom it tends to make still rougher. Hence employers in other industries only engage them for the heaviest and least skilled jobs, and give them little else to look forward to after they leave this one.

The trades, where each mechanic has an assistant who may be either a man or a boy, have already been too fully dealt with to need detailed treatment. In the two most important, Smithing and Plumbing, considerable strength

<sup>1</sup> This is due to the fact that a boy works at the fire for about two years and for four, five or perhaps more as a rivet-carrier.

is required, and comparatively few young boys are employed by the bigger firms. With hammermen, indeed, the work is so heavy that any one below seventeen or eighteen is rarely taken, except in small shops, or in those which have apprentices. There seems to be some deficiency of young workers in the trade, and it appears to be recruited from outside London to an appreciable extent.

Plumbers' work, again, requires strength, but there are a good many young boys in the smaller shops. The Census of 1901 showed some excess of younger workers both between fifteen and nineteen and twenty and twenty-four, and this in spite of a provincial influx that is considerable, though less marked than in other branches of the Building Trades. A good many young men, therefore, seem to leave it, but, owing to the conditions of a mate's work, to do so after rather than before the end of their twentieth year; and this excess is in spite of the fact that many of the mates are grown men. As a result of the depression in the Building Trades since 1901, however, it has disappeared for the time being, but some such surplus seems to be the normal condition.

These two employments, moreover, are liable to other dangers. Instead of a small number having to leave them and find other work, they may stay in them and overstock them with labour. The result will be that, instead of a few being utterly stranded, a large proportion of the men suffer from irregular employment. This tendency is accentuated by the fact that a boy who does not become a mechanic can still get a permanent job as a mate or hammerman, and this also helps to increase the numbers of would-be learners. For the mates are thus recruited from two sources—from those who wish to rise and from those who are content to remain where they are and get their livelihood in this capacity. Further, the number of learners is less easy to regulate than in other trades, because it cannot be known for certain which, or how many, of them will rise. This is perhaps particularly true of the plumbers, thanks to the great facilities afforded to them by the Trade Schools,

and their continuously high percentage of unemployment during recent years lends support to the view that such overstocking is a reality. Among the smiths, on the contrary, the heaviness of the work appears to have prevented a similar result.

Secondly, the prevailing conditions are apt either to cause, or to increase, the amount of Wasteful Recruiting in these trades. This is particularly true where the fear of overstocking renders the men hostile to the efforts and ambitions of their helpers and causes them to put hindrances in their way. Hence the difficulties experienced by the latter cause many of them to fail to learn their business properly, and there grows up a class of half-taught mechanics. This, again, appears to be particularly true of Plumbing, and in it we find a number of "good-mates spoilt" who are inferior workmen, and who do not get regular work themselves, but yet get enough to casualize the employment of abler and better men. In other words, whilst the Blind Alley produces the casual labourer, the Partial Blind Alley is apt to create the casual mechanic.

Finally, the same influences are also apt to bring it about that men who are fit for something better remain mates or hammermen all their lives. Just as some are prevented from learning properly, so others will be hindered from learning at all. Some fail to learn from lack of capacity, and to put it frankly, ought not to have attempted to do so; others possess the capacity, but never make the attempt. In this case, therefore, there is once more a loss and waste of valuable industrial abilities, and these results may be at least as serious as those which normally accompany a Blind Alley.

The second group of Partial Blind Alleys is also composed of skilled trades, but the methods of Service and Migration are generally adopted in them. Thus the surplus of boys is not due to the numbers required as assistants by particular men, but to the fact that in certain easier parts of the work or in other jobs connected with it more are employed as boys than room can be found for as men. This may not be true of each individual shop, but the whole

trade will have some excess. Such a phenomenon is chiefly found in the Furniture and Woodworking Industry, and must be distinguished from the Wasteful Recruiting that is also prominent in it. The one, indeed, tends to produce the other, and it is not always possible to distinguish the results of the one from the results of the other.

In the industry just mentioned it is not altogether easy to estimate the extent of the Blind Alley work of this kind from the published figures. Boys in these trades will be either learners or those who will have to leave them sooner or later. Hence a deficiency of them may be quite consistent with the existence of a certain amount of it, a small excess of boy labourers being more than counterbalanced by a marked shortage of learners. This difficulty is, to a great extent, common to all Partial Blind Alleys.

A second and in many ways more serious one, is the result of influences that have specially affected the Furniture Trades. Like the Building Trades, they enjoyed a prolonged period of exceptional prosperity previous to the Census of 1901, and an even longer one of no less exceptional depression since, which has not long come to an end. The result has been first to increase largely the numbers entering them previous to the former year, and then to cause these numbers to fall much below the average. This may be illustrated by the following table :—

## CENSUSES OF 1901 AND 1911.

*Percentages employed at each year of age at certain age groups*  
(25-34 = 100).

|                                     | 15-19. |       | 20-24. |       | 25-34. |       |
|-------------------------------------|--------|-------|--------|-------|--------|-------|
|                                     | 1901.  | 1911. | 1901.  | 1911. | 1901.  | 1911. |
| London (All Occupied Males) . . . . | 102    | 98    | 115    | 102   | 100    | 100   |
| Cabinet Making . .                  | 122    | 86    | 122    | 93    | 100    | 100   |
| French Polishing . .                | 136    | 69    | 143    | 79    | 100    | 100   |
| Upholstery . . . .                  | 119    | 97    | 120    | 101   | 100    | 100   |
| Sawmilling . . . .                  | 162    | 138   | 141    | 112   | 100    | 100   |
| Wood Carving . . .                  | 151    | 91    | 130    | 80    | 100    | 100   |

The two periods thus show absolutely contradictory results. Compared with the whole of London, all these trades exhibited in 1901 a marked and sometimes a very marked excess both of boys and young men, and in Polishing, Sawmilling and Carving it appeared only to terminate in early manhood. On the other hand, in 1911 only Sawmilling showed any surplus at all. This was still large, though not nearly so large as it was ten years earlier. In Upholstery the proportions were about normal, and Carving and Cabinet Making had a decided, and Polishing a very large, deficiency. The latter is possibly due in part to the increased employment of women and girls in the easier parts of the work. Otherwise the decline in the numbers between fifteen and twenty-five appears to be mainly due to a decrease in those of the learners who have been taken since about 1902 or 1903; for other evidence points to the continued existence of some Partial Blind Alley work in these trades. Hence the figures for 1901 probably represent more nearly the normal conditions, though they undoubtedly exaggerated the excess of boys and younger men. The character and causes of the surplus may now be considered.

In some cases, certain processes and jobs are carried out entirely by boys, who, at any rate in individual firms, are employed in too large numbers to permit of the trade absorbing the whole of them. Sometimes their work teaches them little or nothing, as in certain large machine cabinet factories in which it is highly specialized, and some of them are confined each to a single small job and nothing more. Other instances are the working of semi-automatic machines in engineering and of the punch-press in tinsmithing and art metal work, and perhaps the filing-up of silverware, though here the lad has better opportunities of seeing, though not of doing, other processes.

Cases, again, may be quoted in which there is a similar excess of boys, but their work forms part of the trade and helps them to make a start at it. Thus in French Polishing they are engaged to "clean down" the woodware in preparation for the polish, or even to put on the first coat, or

in wood carving certain things are reserved for them ; and in both such jobs are a step towards learning the business. The smarter, therefore, get to the trade, the others are eventually dismissed, unless, as is more probable, they have previously discharged themselves. Similarly, in processes that are reserved for improvers, more are sometimes taken than can be permanently retained.

Secondly, where sub-contractors are numerous, the employment by each of them of a few boys may lead to an appreciable excess. Thus, in Pianoforte Manufacture, each of them requires one to help him in the smaller firms, whilst in the larger ones they may keep one or two on permanently and engage a few more for the busy season only. At its close these are turned off, perhaps to return for the next season ; and the necessity of employing them in this way often creates a further difficulty.

The same thing happens in other trades where small masters are numerous. In Wood-Turning many of them are working alone or with a single man and take and teach a boy, or have two men and a couple of boys. The larger firms, on the other hand, do not appear to take many, but even so the Census of 1901 showed some surplus up to the age of twenty. So, again, small cabinet makers can make use of one or two boys and bring them on so far as they are able, and thus cause an excess. For even if this is not true of the whole trade but only of certain sections of it, entry into other firms may not be possible owing to the different character or quality of their work, or because the latter get the men they require from outside London.

Thirdly, where firms employ both learners and boys for other purposes, the work of the latter is apt to become a Blind Alley. Some of them avoid this either by making the younger apprentices run the errands or by promoting other lads to the bench. But in other cases few or none of them are thus provided for, and though they may get the chance to work their way up elsewhere, some of them will be compelled eventually to leave the trade.

In such ways, therefore, these trades employ a moderate

excess of boys, and though able to absorb most of them, cannot find room for all. As a rule, this surplus is smaller than where Following-Up prevails, partly because it is only in certain firms that it exists to a serious extent, and partly because some of these lads can find employment elsewhere. For the fact that certain shops have more than they can keep on permanently does not necessarily mean that there are too many in the trades taken as a whole. At the same time, in those which we have been considering and in some others, these causes have been sufficiently in operation to constitute them Partial Blind Alleys. Hence there is some excess, but this is not due, as in the first case, to any fixed combination of boys and men in pairs or squads, nor is it brought about solely by defects in methods of recruiting. Its cause is that for a variety of reasons more boys need to enter them than they can permanently keep and that those who have to leave some firms cannot be entirely absorbed by others.

Regarded as a whole, Partial Blind Alleys have created a distinct problem of their own, different both from that of the Total Blind Alley, and that of the Wasteful Recruiting of trades and occupations. Compared with the former they frequently provide work for a youth rather than a boy, and where it can be done economically by an adult, they do give at any rate permanent semi-skilled employment. Moreover, the boy or youth attached to them is under stricter discipline and control than the errand or van boy, and often leaves the job, if he does leave it, a steadier and more regular worker than when he entered it.

On the other hand, they have their own special difficulties. They employ many older boys and youths and a change, for those who have to make it, is more difficult at eighteen or afterwards than it is at an earlier age. Again, some who are fit for something better remain all their lives in semi-skilled jobs. Thirdly, they are apt to become overstocked, when, as sometimes happens, those who ought to leave them contrive to stay on, and thus cause or increase irregularity of employment. Finally, for the reason just men-

tioned, youths liable to be displaced from a Partial Blind Alley may be more than usually difficult to deal with. For in a Total Blind Alley it is possible to know, with some degree of certainty, how many will have to find other jobs sooner or later ; but in a partial one, whilst comparatively few leave the trade altogether, it is not easy to tell in advance which these are ; and in those which need older youths, the difficulty is all the greater.

This problem, therefore, requires a special organization of its own to distinguish clearly those who are, or who are not, to enter the trades concerned. Probably for this reason the right to them may have to be confined to apprentices or to others who are definitely accepted as learners, for whom a reasonable period of trial, of as much as a year or even more, should be allowed. This would help to guard against overstocking and render more easy the improvement in methods of teaching. On the other hand, those who cannot enter them could then be drafted into other positions, perhaps within the same factory. Lastly, such an organization will check the tendency to wasteful recruiting and assist the supervision of the individual boy, and so help to overcome these difficulties also.

### III. THE WASTEFUL RECRUITING OF TRADES AND OCCUPATIONS.

The occupations, so far considered, all have a natural excess of boys, and fail to give employment after boyhood is over to a larger or smaller proportion of them. In the third phase of the problem, this surplus is produced by other causes. The question of Wasteful Recruiting will be considered mainly in connexion with the skilled trades, where its importance is greatest, but it is also found in many others. In such trades learners are taken in the ordinary way, and the nature of the employment does not in itself require an excess, yet more will enter many of them than they can permanently retain, and what is more, they will have to do so if a sufficient number of competent men is to be provided. This surplus, therefore, is brought about

by the failure of a good many either to learn their trade at all or to learn it properly, and they thus grow up without proper command of any occupation. Hence this is caused by failure to learn where the opportunity to do so exists, and not, as in the two previous cases, by the lack of that opportunity.

Some failures, indeed, there must always be in every trade, and so Wasteful Recruiting does not consist in their existence, but in the fact that they are far more numerous than can be accounted for by the sprinkling of lazy or incompetent boys who are found everywhere. In short, Wasteful Recruiting implies the spoiling of much good material, and that boys start to learn a trade—sometimes with the fairest prospects—and fall out by the way. Hence, even after allowing for necessary wastage, the production of a given number of competent workmen requires the taking of a considerably larger number of boys; and so many skilled trades have a reserve of boy labour. It is, nevertheless, the extent of this rather than its mere existence, that constitutes the problem.

As thus defined, Wasteful Recruiting falls into two classes. Either a boy fails altogether to learn his trade, or he grows up an incompetent or inferior workman; and in either case larger numbers enter it than can find full employment later. The matter may now be considered in detail.

First there is direct *mis-placement* or the putting of boys into unsuitable trades or situations—either into the wrong trade or into the wrong shop in the right one. Both mistakes are common; and as regards the former, parents are not seldom to blame, less for want of interest in their children, than for want of thought and care. The first thing that offers or that occurs to them is too often taken without reference to the boy's tastes or abilities, and others try to put their sons into positions that are beyond their capacity. Often, again, nothing is done until they have actually left school, and then work has to be found in a hurry; and sometimes the thing is left entirely to chance.

Moreover, considerable difficulties face even the most

thoughtful. Good openings are scarce, and some of them appear to be unpromising ; whilst a boy often does not know his own mind, or may not be specially suited to anything in particular. There is great danger, too, in their remaining idle, and to this parents are quite alive. " There are so many boys after jobs," said one mother, " that we thought he had better take the first he could get." Finally the right job is hard to find, and neither parent nor boy knows how to find it, and, till recently, there has been little organization to help them to do so. Anyhow, whatever the cause, the effect is the same. Going to the wrong trade, the boy fails to master it and either has to leave it altogether or content himself with irregular employment.

Even in a suitable trade much the same result follows from choice of the wrong type of shop. If it does inferior work or lacks capacity to teach, or still more, if it neglects to do so, a boy may come out of his time little better off than when he entered it. Here, too, parents are, or have been till recently, very badly off for expert advice ; but, on the whole, this danger is not quite so great as the first. Being suited by the trade, and possessing the capacity to learn, the lads only need to get the chance, and the abler of them make one for themselves by moving away to other firms.

For these and other reasons, therefore, it is quite a common thing for a boy to leave one trade for another, as a result of causes which sometimes are and sometimes are not under his control. The change may come soon, or it may come late, but sooner or later it does come. The chance way in which he obtained his job often ties him to it less strictly than if he had been more carefully and formally engaged. So he goes to it for a few months, for a year, perhaps for two, and learns a little. Then he gets tired of the work, or thinks he is not learning quickly enough, or has a row with somebody, or, in some cases, merely wants a change, and off he goes. After this he may get another job in the same trade, he may start in a different one or he may take purely unskilled work ; and it is not unusual for a youth to nibble

at several trades in this way with spells of boy labour sandwiched in between them.

Moreover, change from one trade to another is sometimes the only alternative to long periods of unemployment. Where there are marked seasonal variations, as in Pianoforte Manufacture, or where the work of individual firms comes in rushes, boys are sometimes treated much as the men are, and are dismissed as soon as things fall slack, though many firms try to avoid this. This forces them into other jobs—skilled or unskilled—and some do not return with the busy season and indeed soon contract the habit of wandering about and sticking at nothing. Again, a long spell of unemployment may have a similar effect, and so, for one reason or another, many leave the employment which they started to learn, or if they do not, work at it so irregularly as to become inferior workmen.

Further, there are the results of defective training, and more especially those connected with the casual picking-up of a trade. Though not unknown, these are as a rule least serious under the more definite forms of Regular Service. They are more considerable under its other types and in the case of Following-up, and probably most serious under Migration. To a few of the abler boys, indeed, the latter may give as good a training as, and larger earnings during its course than, more regular methods, discontinuity in the work being in their case compensated for by its greater variety. But for the great majority its dangers outweigh its advantages. They are peculiarly liable to unemployment, as they are compelled to move about from firm to firm. They are left too much to their own devices and, not being recognized learners, it is no man's business to teach them; whilst fear of cheap labour may set their fellow-workmen against them. Many leave the trade and still more, without dropping out altogether, grow up incompetent or only partially taught. "I object to a boy learning as an improver," one foreman said, "because he picks his trade, so to speak, in the gutter."

To learn properly by Migration, the improver has to

choose carefully the kind of shops he goes to and regulate the time he stays in each ; but many stay too long at inferior work, or select a new place mainly with a view to what they can earn. Further, being paid as workers not as learners, they have to be kept on what is most profitable to their employers ; and, particularly when paid piece-work, are liable to acquire wrong methods by turning out inferior stuff rapidly and in a slipshod way. The necessary changes of job, again, create the habit of continually changing, and lead to loss of capacity to stick steadily to anything.

Finally, the attraction of immediate high earnings causes some to neglect to learn their business thoroughly. Finding employers offering good money, especially when trade is brisk, they fail to see the need for further improvement. Thus between 1895 and 1900 foremen stonemasons in London were putting on almost any one who could handle a chisel, and young men were always changing firms to increase their wages. Only when depression came did they realize their shortcomings, too late to remedy them. In Silversmithing, again, young fellows may quickly become worth 25s. to 30s. a week at a particular kind of work, at which they will stick and never learn more.

For even when a youth is at pains to learn, the power to earn comparatively high wages may make him think that he knows more than he does, or that having learnt one section of a trade well he has learnt sufficient. And if some of the more thoughtful boys fall into this error, others simply learn a part of the business and then sacrifice everything to earning as much as possible. Indeed, some Instructors in the Trade Schools are so alive to this danger as to fear even the payment of such good rates. Here the result is less frequently the generally inferior workman than the man who can do only certain parts of a trade. As the most serious, therefore, the case of Migration has been described in detail, but much that has been said will apply also, though in a lesser degree, to the various forms of Regular Service, since these check, but do not always nor altogether prevent, the creation of a reserve of boy labour,

Further, there is often waste in connexion with those unskilled jobs about an industry, which can and sometimes do give a chance to learn it. For owing to incapacity or bad behaviour or failure to stick to their work, boys allow chances to go begging, and what might be the making of a few boys merely provides a succession of temporary jobs, which lead to nothing, for a much larger number. Again, irregular employment of improvers often creates a casual reserve of them, and in certain cases individual employers find it to their advantage to overstock their business with younger workers.

The same phenomenon is also present in the case of unskilled boy labour, where it is largely a by-product of Blind Alley employment. In the skilled trades far more boys enter than learn, not because excessive numbers are engaged, though in some trades this cause also operates to a certain extent, but because so many fail to learn; and, as a result, a Reserve of Boy Labour has to grow up to ensure a sufficient supply of men in the future. The chief elements in this Reserve may now be briefly summarized as follows. To begin with, there are those who have been wrongly placed from the very first; secondly, those who have started in a suitable trade but failed to stick to it; and, thirdly, those who have failed to learn it fully. It is comprised not only of youths who drop out before or after reaching manhood, but of many of those who stay in a trade as irregular or low-paid workers<sup>1</sup>; and whilst the share contributed by each single cause may not be large, the total reserve is often considerable. Its size varies from trade to trade. Where methods of teaching are well regulated as in Printing, it is small; where the most haphazard ones prevail, it is decidedly large, and it frequently reaches appreciable dimensions.

Moreover, this Reserve is not simply an ordinary reserve of casual labour, similar to that which occupies so prominent

<sup>1</sup> Because, as will be described later, more of such men are required for a given output than if they were well taught. Hence a reserve of boys sufficient to produce this greater number is required.

a place in the case of men. Such a one is sometimes found, arising partly out of the irregular employment of improvers and others and partly from the irregularity of the lads themselves. Still, taking the skilled trades as a whole, it is not important. The real Reserve of Boy Labour is an educational one, and is composed of those who are seeking education and training and not of those who are waiting for employment.

A comparison of the two Reserves of Adult and Juvenile Labour will perhaps most clearly explain my meaning. The former may be described as follows. Different firms in a trade employ a number of men which varies from day to day, whilst each of them tends to be busy and slack on different days. If, therefore, as is usually the case, they do not get their less regular workers from a common source, each firm attempts to attach to itself a supply of men sufficient and even more than sufficient for its maximum requirements. Hence the number seeking work is often greater than can find employment even on the busiest day, and some are unemployed more frequently than they are employed. For instance, suppose ten firms require each a number of men that varies from 50 to 100, then if each gets its own absolutely independently of the others, they will have altogether 1,000 men in attendance on them, "either working or waiting for work"; and as their busiest and slackest days never correspond, the whole number is never working on any one day. If, on the contrary, all the men were drawn from a single centre, both the maximum and minimum number would fall between these two extremes, being say 800 and 600 men respectively. Consequently on the busiest day there is only work for 800, but under existing conditions the full 1,000 are required. With careful organization, therefore, 200 of them could be dispensed with, but as things are, with each individual employer getting his own separate supply, they are necessary to enable all the work to be carried out. In practice, indeed, there is nearly always some interchange of labour between different firms, though not nearly as much as there might

be, and so the reserve of labour is still considerable ; but if the work were properly organized, this reserve would become a surplus for which outlets would have to be found elsewhere.

Similarly, in recruiting a trade, a certain number of boys are required to keep it up and to allow for any necessary increase in it, and also for wastage by death and in other ways. Now a Reserve of Boy Labour is found, when, in order to recruit it, more than the requisite number have to enter it. Under normal conditions, therefore, each trade tends to take enough learners to provide an adequate supply of workmen in the next generation ; and the actual number of boys necessary for this purpose corresponds to the men actually employed on the busiest day in the previous illustration. This represents also the total capacity of a trade to absorb them and varies from one to another according to its rate of growth, the expectation of life of its members, and so on.

Now if the methods of training and organization were perfect, just this number would be required, with a small allowance for deaths and unavoidable cases of failure. Actually under present conditions more, and sometimes many more, boys have to enter the trade, since otherwise sufficient journeymen will not be obtained. The cause of these numerous failures has already been described, and their number will be in proportion to the efficiency of methods of training. As with casual adult labour, therefore, the additional boys are a reserve and not a surplus, since under present conditions their attempted entry is necessary, and more have to try to learn the trade than could find regular employment at it if all succeeded, just as more casual labourers have to be seeking work than could possibly find it on any one day.

This may perhaps be made clearer by a hypothetical illustration. A trade requires so many learners to keep up its supply of journeymen. Say, for instance, that the number is 105, and that, allowing for natural wastage,<sup>1</sup> 100

<sup>1</sup> By this I mean such wastage as is caused by death, illness, accident, emigration and other unavoidable causes of failure.

of them become journeymen. But a considerable proportion may fail to learn or to learn properly, and either leave the trade early, fail to find employment as men, or only obtain it when business is brisk and better men are not available. Instead of 100 journeymen, therefore, the trade has only 100 less these failures. If, for instance, there are 20 of them, then the 105 learners only make 80 instead of 100 journeymen, and to get the latter number, something like 130 learners will be needed. These figures are given purely by way of illustration and the size of the Reserve can seldom be so large as this. Often, however, it is considerable, and so long as it continues to be required, there must, even in the skilled trades, be a special problem of Boy Labour, and entry into one of them will be no necessary guarantee against growing up without an occupation.

Compared with the Reserve of Adult Labour, indeed, this juvenile one is small. For one reason, the proportion of failures is more or less limited. Employers are not so careful to provide a reserve of boys as of men, simply waiting till the need arises. Then if those they have taken do not prove sufficient, more are engaged or provincial workers are got in. Nevertheless, the Reserve of Boy Labour is both a real and considerable one, and until the causes of Wasteful Recruiting are removed, the necessity of taking sufficient boys for all emergencies will continue, and those who fail to learn will have to be replaced. So long, therefore, as our methods of recruiting produce a large proportion of failures, the number of boys required to enter a trade will be permanently in excess of the number that can get full employment at it. That is to say, modern conditions bring into the skilled branches of a trade more boys than can find that full employment in it as men, defining it for this purpose as such continuity of work as the general conditions of the trade, including its seasonal and other fluctuations, will permit.

The same result, therefore, is reached as in ordinary Blind Alley employments. Each alike leaves a boy stranded in early manhood without full command of a definite occu-

pation, and the only resource left either to the mechanic or the labourer is casual or low-paid work either within or without his trade. The trouble, however, is not so much that existing methods of recruiting cause more boys to enter a trade than it can permanently absorb. This is but a part of the evil, and, if they could be made to leave it before it is too late, but a small part. Indeed some boys only find the right trade after sampling two or three others. The chief trouble, on the contrary, is either that they stay too long in trades to which they are unsuited, until, that is, it is too late to find another, or that they never stick to any but continually chop and change and so learn nothing.

In conclusion, the elements of which this Reserve of Boy Labour is composed may be shortly described. First there are those who drop out altogether from their various trades. Some do so after one or two years, and others nearer the time when they reach manhood, whilst yet others are forced out by stress of competition after they have reached it; and further there is a stream of boys continually entering and leaving them. Secondly, some who are able to continue in a trade after reaching manhood, have such an inadequate knowledge of it as to form a fringe of casual workers whom it is only worth an employer's while to employ during busy times, or for a few days a week as odd men; and either lack of ability, failure to stick properly to the work, or the desire for immediate high earnings, may produce this result.

Thirdly, instead of a smaller body of fully trained mechanics being regularly employed, a larger number who are partially trained are engaged for parts of the year only. This is sometimes the fate of the over-specialized workman. In various trades different products are in brisk demand at different periods of the year, and trade is busy in one article and slack in another. Hence a man who can only make one thing well, is kept during its busy season, but as another comes into demand, some one else, who is equally specialized, is taken on to make it, whilst an all-round man would simply be shifted from one job to another and em-

ployed continuously. In short, the work is in this case spread out among a larger number of workmen who are employed regularly for a large part of the year, but unemployed for the rest—four men, say, work for nine months each instead of three men for the whole twelve.

Fourthly, Wasteful Recruiting sometimes produces in a trade a class of low-paid but regularly employed workmen. Setting aside those who can only do certain of the roughest kinds of work, like the men who are paid about 4*d.* an hour to paper up furniture previous to its going to the polishers, there are others who can do a job throughout, but their output is so poor in quantity or quality that they only get and are only worth inferior wages. Thus in cabinet making or upholstery, the labour cost of an article is estimated and a man is paid according to the time he takes to make it.<sup>1</sup> Hence where each man's output is small, more men are needed to get a given amount of work done, and the reserve of labour takes this form.

Moreover, the growth of these classes of workers not only creates a reserve directly, but indirectly also by its effect on the methods of employment. Often, both in London and elsewhere, the choice between the regular employment of fully competent men and the less regular employment of those who are not, is largely a question of supply. In most trades both methods are open to the employer, who may be in a position either to regularize his work and keep good men steadily occupied, or to casualize it; and which is the more profitable process may be determined by the quality of the labour available. If business is brisk and there is an adequate supply of good men, regularization is likely. Where, however, Wasteful Recruiting provides a large reserve of inferior or not fully competent hands, especially if this is accompanied by some shortage of really good men, casualization follows for the purpose of making the most

<sup>1</sup> Say, for instance, the Labour Cost of upholstering a certain kind of chair is estimated at 10*s.*, then a man who will undertake to do it in ten hours will be paid 1*s.* per hour, in twelve hours 10*d.*, in fifteen hours 8*d.*, in twenty hours 6*d.*, and so on.

profitable use of the labour supply. As a result both the Reserve of Labour and its irregular training tend to increase and perpetuate themselves.

To sum up, therefore, the Reserve of Boy Labour is not confined to those who, in the course of learning it, are compelled to leave a trade. It is composed in part of them, and partly consists of the greater number of men who are required to do the work when they are not properly trained. Its size must not be exaggerated, but when all its elements are added together, it constitutes, in many trades, a problem of considerable gravity.

One special point remains to be considered. It has been stated that when a boy drops out of a trade, another has to be taken to fill his place, and similar allowance has to be made in order to provide a sufficient number of those who are only fit for casual or irregular work. This is the usual course of events, though, in rare cases, an insufficient supply of fresh labour may cause a shortage of it. Taking the country as a whole, this view holds good, but in London the provincial influx complicates the matter. Instead of engaging other boys to replace those who fail, London employers frequently get in men from elsewhere, many of them indeed relying mainly on provincials, and take very few learners; but it is only the source of supply that is altered, and neither the waste nor the reserve of boys is appreciably diminished, though the number of good openings may be. Moreover, the causes that produce this waste still further increase this preference for and reliance on provincial workmen, and reduce the opportunities for advancement of the London boy.

The causes and results of Wasteful Recruiting have been treated mainly in relation to the skilled trades, but are also at work upon unskilled boy labour, though here they are perhaps best regarded as an incident of Blind Alley employment. In the former these causes include defective methods of teaching, wrong selection of a trade, restlessness and lack of steadiness. In the latter there is little or no teaching, little or nothing to look forward to, and both

responsibility and foresight are at a minimum. Employers complain that they cannot keep their boy labourers, and this "obscures from them the fact that they are using a greater number than can be employed in their trade as men." Continual movement from firm to firm creates a reserve of labour in the group of Blind Alleys taken as a whole, and also involves many lads in longer or shorter spells of unemployment, whilst some employers have difficulty in getting boys. Now many boys' jobs are themselves steady and regular, and a smaller number might quite well suffice to do the work of them; but as it is, a Reserve inevitably grows up.

(d) CONCLUDING SUMMARY.

It may now be advisable to sum up very briefly the main features of the Problem of Boy Labour, as it has presented itself in the preceding pages. The term, we have seen, is used in two senses: to indicate first those jobs which continue throughout boyhood and youth but no longer; and secondly, to signify the failure of a lad's work in any capacity to qualify him for any occupation at all. Further, Boy Labour often creates what I have called the Blind Alley character, the presence of which causes boys to grow up without steady, regular and disciplined habits; and this is the result of the conditions under which they are occupied during youth.

Boy Labour, moreover, falls into three main classes. First, there are the Blind Alleys proper, which fail to provide permanently for the great majority of their boys, and which, unless definite steps are taken to prevent it, leave them at a loose end about the age of eighteen. Usually the job is of a low-skilled character. Such employment is most common in distributive work, but there are also numerous Productive Blind Alleys, in the shape of trades or branches of trades which are carried out mainly by juvenile labour. Some Blind Alleys are directly injurious in their effect, either physically or morally; others produce their evil results indirectly in the creation of bad habits, and because

they themselves lead to nothing, and therefore do not of themselves give a lad any definite objective. The resulting difficulties can be dealt with best by thorough organization and the provision of continued education specially adapted to the needs of those concerned.

Secondly, Partial Blind Alleys are mainly skilled employments, and provide a definite livelihood for a large proportion of those who enter them. To the rest they prove a Blind Alley. Some of them are trades in which each man works with a mate or assistant, and where many of the latter are boys, some of them have to leave the business. In others, numerous causes combine to produce a moderate excess of young workers. Generally speaking, those affected are far less numerous than in the first case, but are in some respects little less difficult to deal with. The chief dangers are either that the superfluous boys will remain in, and overstock, the trade instead of leaving it, or that capable lads, failing to rise, will remain mates all their lives. Again, the remedy consists of careful organization, and if possible, the adoption of a policy of definitely recognizing certain persons as learners.

Thirdly, there is the problem of Wasteful Recruiting. This is, perhaps, most important in connexion with skilled labour. Many workmen who enter an occupation, either fail to learn it altogether, or learn so incompletely as never to get more than irregular work at it. At its worst it causes a considerable Reserve of Boy Labour to enter and try to learn a trade, in order that a much smaller number of skilled and competent men may be trained. This problem is, indeed, a very wide one, and its solution raises in one way or another almost every question of importance connected with Industrial Training.

Thus, Boy Labour may be divided into three classes: Blind Alley Trades, Partial Blind Alleys, and the results of Wasteful Recruiting. In the first two the problem is primarily that there is nothing to learn, and in the third it consists of failure to learn what there is to learn. But in all three the real difficulty is that lads do not acquire or

master some definite trade or occupation, and the Blind Alley itself is a problem, not so much because it leads directly to no employment in manhood, as because the boys whom it employs fail to prepare themselves for anything else after they leave it.

## CHAPTER XVI.

### INDUSTRIAL TRAINING AND UNEMPLOYMENT.

- I. THE INFLUENCE OF INDUSTRIAL TRAINING UPON UNEMPLOYMENT.
- II. THE INFLUENCE OF UNEMPLOYMENT ON INDUSTRIAL TRAINING.
  - (a) **The Influence of the Long Period Demand for Labour.**
    - i. On the Other Causes of Unemployment.
    - ii. On Boy Labour and Industrial Training.
  - (b) **The Existing State of Employment.**
    - i. Among Men.
    - ii. Among Boys.

#### III. CONCLUDING SUMMARY.

Importance of Connection between Training and Unemployment—Different Views of the Influence of the former on the latter—Insufficient Importance attached to Demand—Definition of Demand.

#### I. *Influence of Industrial Training upon Unemployment.*

The Substitution of Methods: its Influence—Blind Alley Employment does not of itself produce Unemployment in manhood—Real Cause of Trouble consists of failure to acquire good industrial habits—Results of this—Tendency to increase irregular employment of boys—Summary of influence of unskilled boy labour in producing adult unemployment—Good Training favours regularization—Effect of Excess of unskilled boy labour checks growth of skilled trades, and favours that of less skilled—This further increases the irregularity—Influence of the Specialized Mechanic—Effect in checking Demand for Labour—Direct and Indirect—Special Difficulty in London owing to Provincial Influx.

Influence of Training on the Other Chief Causes of Unemployment, and particularly on Periodic Fluctuations—Its Influence on the way in which these are met.

Extent to which Good Methods of Training can prevent or mitigate Unemployment.

#### II. *The Influence of Unemployment on Industrial Training.*

##### A. The Influence of Long Period Demand for Labour.

##### (i) On the Other Causes of Unemployment.

The Waste of Labour—Its Meaning—Total and Partial Waste—Waste on a Large Scale involves an ample supply of Labour—Relation of the Demand for Labour to Seasonal Fluctuation, to Cyclical Variations, to General Irregularity

of Employment, to Changes in Fashion and Methods of Production—Summary.

(ii) On Boy Labour and Industrial Training.

Influence of Defective Demand appears in two directions—Waste of Boy Labour—Its form—Boys who grow up without an occupation—Wasteful Use in all kinds of work—Casualization of Boys' Work—Creation of Boys' jobs to utilize the Supply—Waste in Skilled Trades—Concluding Summary.

#### B. The Existing State of Employment.

(i) Among Men.

Ample Supply of Labour in recent years—View that existence of reserves not due to Defective Demand—Recent State of Employment—Views of Poor Law Commission—The Trade Union Percentages—High Figures during the last decade (1901–1910)—Smaller Increase in Bad Years—Influence of Increase in Short Time—Increase in Superannuated Members—Evidence of a Growth in Unemployment during Good Years—The Case of 1906–7—The State of Employment in 1912–3 does not support this view—Unemployment and Unskilled Labour—Dock Labour in London and Liverpool—Conclusion.

(ii) Among Boys.

Evidence of surplus of boys seeking skilled work in London and of shortage of openings for them—Little difficulty in getting boys—Evidence from other towns also suggests a surplus, though a smaller one.

Evidence less definite regarding unskilled boy labour—Some evidence of a deficiency of boys, but more to support the view that there is a sufficiency or even a surplus of them—Shortage, if any, is almost entirely confined to the Blind Alleys—It is probably due to lack of organization rather than lack of boys.

#### III. *Concluding Summary.* Influences exerted by Industrial Training and the Demand for Labour are inter-dependent, as are their results—Both, therefore, must be dealt with and not one only.

The relation of Industrial Training to Unemployment is rendered more important by the close connexion that exists between them. In some respects, indeed, they are independent of one another, but in many others their mutual influence is considerable. The character and quality of the teaching of boys largely affects their employment as men, whilst in its turn the general relations between the demand for, and the supply of, labour influence, for good or evil, the methods by which they are trained.

One school of thought, indeed, attributes adult unemployment largely to the employment of juveniles in Blind Alleys,

to the character and habits produced by such employment, and to its failure to fit them for more permanent occupations. "We regard," says the Minority Report of the Poor Law Commission, "this perpetual recruitment of the unemployable by tens of thousands of boys, who through neglect to provide them with suitable industrial training may almost be said to graduate into unemployment as a matter of course, as perhaps the gravest of all the grave facts that the Commission has laid bare." Adequate allowance, however, is not always made by those holding this view for the influence of demand and supply. Failure to acquire any definite occupation may be due largely to the fact that the number of permanent places is not sufficient. For this reason alone, therefore, some boys may in manhood have to swell the surplus of casual, unskilled labour.

An opposite view regards the influences that lead to unemployment as operating to a great extent independently of Industrial Training, so that the character of the latter decides less whether a man shall be unemployed or not, than upon which man shall fall the unemployment that is produced by other causes. This, with certain reservations, is the line taken by no less an authority than Mr. W. H. Beveridge. Criticizing the contention that Blind Alley employment is "an important, or the most important, cause of unemployment in later life," he declares that in several respects such an inference is over-hasty.<sup>1</sup> Summing up, he says:—

"The improvement of Industrial Training, like every other increase of efficiency, must raise the general level of prosperity. Its direct value as a remedy for unemployment is somewhat limited. It cannot touch the causes of industrial fluctuation or in practice prevent casual employment. . . . There is needed beyond question to-day a revival . . . of the principle underlying apprenticeship, that . . . every youthful worker whilst being employed should also be undergoing preparation for a future career. The disregard of this principle, though it does not create casual employment, undoubtedly facilitates it by helping to swell the supply of unskilled labour."<sup>2</sup>

<sup>1</sup> *Unemployment: A Problem of Industry*, p. 127.

<sup>2</sup> *Ibid.*, p. 131.

Moreover, the influence of partially trained workers in increasing irregularity in the skilled trades is often considerable ; whilst the industrial qualities of the workmen have serious effects in promoting or retarding the success of one town or country in competition with others, and sometimes alter for better or worse the development of individual trades.

Neither view, however, attaches quite sufficient importance to an influence which may be described briefly as that of the Demand of Labour, or, to be more exact, of the relation that exists over a period of years between the Demand and the Supply. Provision for an increasing population can only be made by means of such an expansion in industry as will provide the necessary employment, and so the relation that exists between Demand and Supply over a long period may have very important effects. Demand may increase more rapidly than Supply : it may increase at the same rate or it may fail to increase so fast ; and in either case an influence will be exerted upon employment which is in addition to, and to some extent independent of, that which springs from the periodic fluctuations of trade. Hence the expression Demand for Labour will, for the sake of brevity, be used in this chapter to denote this relation between Demand and Supply. When, therefore, it is said to be "good" or "bad," "brisk" or "dull," "ample" or "defective," the meaning is that in one case there is enough employment to occupy fully the whole supply of labour and that in the other the amount is insufficient to do this. In this sense, moreover, the Demand for Labour affects the extent and character of the unemployment that is the result of other causes, and helps to produce or mitigate defects in Industrial Training.

Two vital questions, therefore, have to be asked and, if possible, answered in the present chapter. First, how far does Industrial Training or the lack of it affect the amount and regularity of employment ? Secondly, how does the Demand for Labour, as defined, affect the character of Industrial Training by rendering necessary greater or less care in teaching the workmen ? Each of these influences will

be found to be considerable, and they react upon one another. We may first consider the former.

### I. THE INFLUENCE OF INDUSTRIAL TRAINING UPON UNEMPLOYMENT.

It is sometimes assumed that in many, if not in all, industries, practically only one method of production and training is possible, and that, therefore, skilled, or at least adequately trained, workmen are a necessity to them. Starting from this hypothesis, therefore, it is argued that employers in their own interest will be compelled to teach, and to teach properly, a sufficient number to keep up their trade. Were this reasoning sound, indeed, the influence of Industrial Training would determine only which men should be unemployed, and not whether a man should be unemployed or not. In practice its influence is often very much greater and helps to determine the amount as well as the incidence of Unemployment.

The cause which brings about this result may be described as the Substitution of Methods. Employers in many cases are able to choose between having their business carried out by skilled mechanics, dividing it up among a number of less skilled hands, or even replacing adult men altogether by women, boys or girls. Hence fully skilled workmen are not an absolute necessity, and, if enough of them are not forthcoming, methods of production can be adapted to the labour supply. Again, qualities of work are often in competition with one another, whilst the grade of labour employed varies with the quality. So a large supply of those who are low-skilled or badly taught may cause lower grade goods to form a bigger proportion of the whole output. Similarly different trades are competing for the supply of labour, and where a large amount of it is of poor quality, a stimulus will be given to the development of those in which this can be utilized to the best advantage.

The mere fact of putting boys to Blind Alley work does not in itself produce unemployment in manhood. A

considerable number of them must eventually content themselves with low-skilled jobs, since the skilled, and the higher grades of semi-skilled, trades cannot find room for all. So boy labourers, apart from those who are waiting for better positions, will in time become adult labourers, though they have often to make a change from one thing to another. Hence the fact that they start life in a Blind Alley is not itself the cause of their unemployment, and this cause has therefore to be sought for elsewhere.

Now the greater specialization of the present day requires even of the lowest grades a certain modicum of knowledge and capacity, and that they should be regular and disciplined workmen. In short, there is less room now than formerly for the absolutely unskilled man. But habits of regularity and discipline are just what the ordinary boy labourers often do not acquire. On the contrary, they grow up casual and irregular, and thus unfitted both physically and mentally for regular employment of any kind.<sup>1</sup> In short, many of them have become permeated with what in a previous chapter I called the Blind Alley character. They know nothing, not even how to work steadily; and this is the real reason for their lack of success later on. Moreover the quality of much of their labour is very poor even during boyhood. "Boy labour," says Mr. Cyril Jackson, "can seldom be said to be really efficient. When boys leave school they are too young and unformed in character to give steady application to their work, and some employers say they lose more by the character of their boys than they gain by their cheapness."<sup>2</sup>

Hence as a result of these influences a low grade of labour grows up and employers in their turn are less ready and able to take trouble to push on those whose capacities, do not justify promotion and many of whom do not stick to their job long enough to make it possible. Thus as boys

<sup>1</sup> Not so much in the sense that they could not take regular jobs, if such were offered them, as that they would not prove themselves good workmen in them, especially at first.

<sup>2</sup> *Report on Boy Labour*. Poor Law Commission. Appendix XX, p. 13.

are themselves continually moving out of one thing into another, their employment becomes casual and irregular even in their earliest years. A good deal of time is lost between jobs, and these intervals grow longer and more frequent as they grow older.

The tendency, therefore, to employ a larger number irregularly rather than a smaller number regularly, though less marked than with men, is considerable, and is probably increasing. Moreover the demand for boy labourers is often far keener than the demand for learners, and so attracts them from learning to labouring. Thus excessive numbers enter those occupations which are least permanent, and they in their turn, when they grow up, of necessity overstock the market for adult unskilled labour and render it more irregular and casual than it otherwise would have been. In other words the surplus of the latter is due mainly to the facts that more boys than are required to do the work enter Blind Alley employments in the first place, and that others whilst in them fit themselves for nothing better. Its irregular character also is largely the result of influences that have been at work during this time. In the skilled trades, too, similar causes are producing similar results.

Unemployment of this origin is probably far more frequent and far more severe than that created by an agency which bulks much more largely in the public view—namely, the direct displacement of men by boys. The amount so produced is, as a rule, much exaggerated, though in individual cases it may be considerable. Single processes are usually affected and not whole trades. Such displacement too is often part of a general extension of specialization and is accompanied eventually by an expansion of the trade that in the end increases its demand both for men and boys. Temporary displacement, indeed, there often is, but the amount of it that is permanent is not very considerable.

To sum up, therefore, the conditions under which unskilled boy labour works are responsible for much unemployment among adult men. First the excessive numbers so em-

ployed, reinforced by those who for various reasons fall out of skilled industries, overstock the unskilled labour market and create conditions leading to irregular employment.

Secondly, the resulting defects of character unfit many for steady and regular work, or, at least, leave them either with no particular job to which they can turn their hand, or, if they do know one job, with their powers so little developed as to render them quite incapable of adapting themselves to anything else if this should fail them.

Further, the result of the competition between the more and the less regular methods of employment depends largely on the number and competence of the workmen available. Regularization is likely to be profitable where the men are steady, disciplined and competent, each in his own business, and especially where the supply of them is not more than sufficient for the demand. Casual and irregular employment requires a larger number to accomplish a given output than do more regular methods, and the quality of their work is somewhat less important. Now the conditions just considered do provide an ample supply of labour, much of it of poor quality, and so favour the adoption of the latter system rather than the former.

This excess of boy labour, however, does not appear, at any rate in London, to produce directly a shortage of mechanics, partly because of the possibility of obtaining them from other places. Indeed in the skilled trades, whilst men may be difficult to obtain in one or two districts, defective methods produce more than a sufficiency of skilled labour, though there may be a shortage of really good men. Indirectly, however, owing to the substitution which has been described, it appears to retard their growth. The development of industries and the investment of capital in them depends largely on the men available. Now Blind Alley Employments and Wasteful Recruiting cause so many of them to be unskilled or inadequately trained as to make for the more rapid development of those industries which require and utilize a lower level of skill.

The result, therefore, has not been to check the higher branches directly by creating a shortage of men in them, but indirectly by encouraging the investment of capital in these inferior grades.

Moreover, the methods prevailing in many skilled industries have created or increased unemployment in them, much in the same way that the conditions of Blind Alley work have done among unskilled workers. The result of what has been called Wasteful Recruiting has been to compel more boys to enter, or to try to enter, a trade than could find full employment at it if they were all successful. Hence it comes to possess a Reserve of Boy Labour. Some leave it altogether and so further increase the excess of unskilled. Others grow up partially trained mechanics who can only obtain, and may only be fit to obtain, casual or otherwise irregular employment. Now, because of this, more of them are required than if well-trained men were engaged and kept on regularly, whilst the supply of them is often very ample indeed, and even in excess of these requirements. Further, not only do existing methods encourage casualization generally, they also, as just stated, cause the cheaper and inferior branches to be developed at the expense of the more skilled in order to utilize the available labour to the best advantage. Hence in skilled work bad methods of training produce unemployment in two ways: by making it more profitable to casualize than to regularize, where either alternative is open, and by encouraging those branches in which, in any case, employment is likely to be least regular.

For it must not be forgotten that the lower the grade of work, the greater is likely to be the irregularity, especially with an ample supply of labour. Good men are often scarce, and with a high-class output it may be worth while to make considerable sacrifices to keep them. With the inferior qualities, this is less necessary. The men are more easily replaced, there are more of them to select from, and far from making efforts to retain them, employers may even be glad to get rid of the less efficient as early as possible.

Similar effects result from the production of the incom-

pletely-trained specialized mechanics who can do only part of a trade well. Certain trades are busy on different articles at different seasons of the year. Hence the all-round man is at work throughout, first on one thing, then on another, but the specialized worker must wait for employment until his particular branch is busy. So a class of men grows up who are employed, not indeed casually, but regularly for a portion of the year only. Likewise where a change in demand requires a different class of article, the latter are far more likely to be displaced. Finally, the substitution of female or juvenile labour is likely to be most considerable where that of the adult men is of an inferior quality. In these ways, therefore, bad methods of training increase the amount of casual and irregular employment, and are apt to do so even more than in proportion to the increase in the number who are competing for it.

Moreover, in the last resort regular employment depends on whether the Demand for Labour can keep pace with the Supply, and its failure to do this may be an important cause of unemployment. Thus the effect of Industrial Training on the development not only of particular trades but of the National Industry as a whole is important. For it helps directly to raise or lower cost of production. The better and more skilled a workman is, the larger and the cheaper will be his product. Well-trained workmen, therefore, are relatively cheap, and badly trained workmen proportionally dear; and where the latter are numerous, cost is increased, manufacturers are less able to compete with foreign rivals, or are deterred from developing their business by fear that sufficient skilled labour may not be forthcoming. Thus the progress of a trade may be checked. Manufacturers may be vainly seeking for competent workmen whom they cannot find, whilst men are unemployed because they are not sufficiently skilled for the purpose, and so a shortage of really good men may accompany a general surplus.

Indirectly, too, the production of inefficient workers checks industry. Those who are poorly trained are also

poorly paid, either because their rate of pay is low or because their employment is not regular. But low earnings mean low purchasing power and a smaller demand for the products of other industries, so that the development of the latter is retarded. Hence when bad methods of training are general the aggregate national demand is correspondingly reduced, and this affects not only those immediately concerned, but almost every trade and every class.

In London, moreover, the common practice of obtaining from outside men who have already learnt their business, renders possible an unusually large waste of boy labour, since any shortage can be made good in this way; and on the other hand, the difficulties of training, and the inferior industrial quality of many after they have been trained, cause employers to rely more and more on the provincial supply. So the influx leads to worse methods of teaching in London, and these in their turn encourage and increase the influx. Thus the openings that exist for London boys are not all fully utilized, and the reserve both of skilled and unskilled is still further enlarged.

So far bad methods have been shown to influence directly the amount of unemployment. Many of its chief causes, however, come to exist independently of the quality of Industrial Training, but even these can be, and are, aggravated or mitigated by it. They fall into four classes—Seasonal Variations in employment within the year, Long Period or Cyclical Variations over a number of years, General Irregularity and Casual Labour, and the Displacement brought about by Changes in Demand or in Methods of Production.

Of these the first is due largely to climatic and social influences, and the second to general causes affecting often the whole world, and both will exist whatever the character of the teaching that is given. Similarly the last cause is to a great extent inseparable from the progress of industry.

Again, the present organization of labour often necessitates a considerable amount of casual and irregular employment, if it is to be carried out efficiently upon existing lines. Here, however, the connexion between training and unem-

ployment is far closer. The present chapter has already attempted to show how defective methods may increase and largely create casual employment both in skilled and unskilled trades. This they do by producing a supply of labour which does not possess habits of steady and regular work, and which therefore an employer does not find it profitable to employ continuously. This influence frequently makes casualization necessary. Moreover the supply of such labour is often ample compared with the demand and so makes casualization profitable. Hence casual labour becomes more common than the needs of industry require, and those branches which utilize it most freely are the most rapidly developed. Improved methods on the other hand by making better workmen make it more worth while to regularize their employment. At the same time they lower cost of production and increase the demand for labour, and so further encourage regularization.

As regards Displacement, the influence of Training varies. A change of fashion may require a totally different kind of goods, and here a workman's capacity will make little difference, except that a well-trained man may prove himself more adaptable and so fit himself more readily for something fresh. With less fundamental alterations, however, its operation is far more direct. The good man is worth keeping and initiating into the new work, even at the cost of some trouble and expense. The inferior man will be put off at once and another taken in his place, or the employer may prefer to train a youth to do the work. Semi-skilled and unskilled workmen are chiefly affected in this way, since in the case of the mechanic the change often means a greater reduction in earnings than he is prepared to accept.

With seasonal and cyclical depressions, again, industries and districts, in which the workpeople do not know their business well, compete at a disadvantage, whilst an improvement in their capacity may so stimulate trade as to mitigate their force and extent and increase the briskness of good times. More overtime is worked when things are busy,

and there is less short time or unemployment when they are slack.

Moreover, Industrial Training exercises a still greater influence over the methods chosen to meet a depression. Where labour on the average is inefficient, dismissal of the less skilled hands takes place, whilst the better men are kept on, and the former are often got rid of at the earliest possible moment. Where, however, the level of skill is high, it is important to keep a good staff together and the employer uses every means in his power to do so.

Here he has several alternatives. First the whole shop may be put on short time during slackness, and heavy pressure may be met as far as possible by overtime. The men thus share out whatever work is going. The second alternative is to make for stock in the slack season, the stocks being cleared during the busy period. This method is not uncommon in the Furniture Trades. It requires that the articles made shall be in constant demand, and if they are of a bulky character the cost of storage is apt to be prohibitive. Some firms utilize both devices at the same time. Thirdly, but less frequently, other kinds of goods are produced during the slack months. Lastly, where climatic or social influences make work inconvenient but not impossible, effort and expense are incurred to regularize it and keep it going throughout the year.

The adoption of these devices, therefore, is likely to depend on circumstances. On general grounds, regular employment is more profitable to the employer than casual. It creates good steady habits and makes the workmen more efficient, since they are better fed and have a higher standard of living. Whether, however, this will be sufficient to compensate for the trouble and expense of regularization in fluctuating trades will depend, partly at least, on their skill and competence, and in doubtful cases this often turns the scale. Further, highly skilled labour usually requires regular conditions to do its best. Otherwise deterioration is apt to set in. Moreover, even apart from this, really good men are worth some effort to keep together,

and a decent firm will recognize that it has a duty in this direction.<sup>1</sup> Where, however, the causes at work produce inferior hands and a surplus of them, the incentives to regularization are at their lowest.

It is not suggested that good training can do more than mitigate such variations, but it does much to reduce them, and could do more, especially in relation to the shorter seasonal movements. The longer cyclical fluctuations are less amenable to the treatment described, though with them also employers will take a contract at a very low rate of profit in order to keep a good staff together. Demand, if brisk, may do even more to mitigate such seasonal and cyclical causes of unemployment, but training also operates by influencing it. Better training means more skilled and more efficient workmen, and so stimulates the very demand that is so important an element. A general improvement will have the effect of increasing earnings and, therefore, purchasing power in every trade. Finally, there will be less danger that employers, as sometimes happens now, will have to forego opportunities for extending their business owing to the difficulty of getting labour of a sufficiently high quality.

## II. THE INFLUENCE OF UNEMPLOYMENT ON INDUSTRIAL TRAINING.

It is now necessary to consider the matter from the opposite point of view, and to ask how the existence and amount of Unemployment influence Industrial Training, or to speak more broadly how is the latter affected by the general or long-period Demand for Labour. And here it may be well to repeat that this last phrase is used with an

<sup>1</sup> E.g., A large engineering firm informed me (in the autumn of 1909) that they required the highest class of labour for their work of a kind that is always difficult to obtain, and their men could always command full money anywhere and at any time. Hence to keep their staff together they had not only to keep their men employed, but on full time in busy and slack seasons alike. They met the latter by making for stock which sometimes proved inconvenient, but had to be done. They had not worked short time since 1886.

implied reference to Supply as well as to Demand, and that what is important is the relation between the two over a period of years. For the sake of brevity, however, Demand is referred to by itself rather than Demand and Supply, but it always has this relative sense. It may be said to be good or bad over a number of years when the amount of employment is, periodic fluctuations apart, either ample or defective.

**A (i). The Influence of the Long-Period Demand for Labour on other Causes of Unemployment.**

In this sense, therefore, the Demand for Labour influences greatly the degree and character of the Unemployment that is found in a country. This influence indeed will depend mainly on the extent to which it renders possible the *Waste of Labour*, which may be briefly defined as follows.

Under all conditions some men are likely to be found who are not fitted to perform definite work of any kind, but either have grown up without the ability to do so, or have lost that ability later. Consequently their labour may be said to be wasted because their faculties cannot be properly utilized. One instance of this is provided by the excessive number of boys who spend their youth in Blind Alley work, and another by the men whose skill is so deteriorated by unemployment that they sink eventually into the lowest grade of casual labour, or even into Unemployableness. In its more extreme form, therefore, this *Waste* may be said to be *Total*, because the men concerned are in an industrial sense entirely lost to the community. There may also be *Partial Waste*, where a man's capacities are either not fully developed or not fully employed. For instance, the Reserve of Boy Labour brings into existence many imperfectly trained mechanics, who, as a result, are employed casually, or for certain parts of the year only, working and standing idle alternately.<sup>1</sup>

<sup>1</sup> An instance of failure to develop capacity fully can be found in the case of the able boy who starts work as a mate or assistant and failing to rise remains such all his life. Here, too, there is waste.

Now for such *Waste*, whether it be Total or Partial, to take place upon a large scale, some deficiency of Demand itself is a necessary preliminary. More men are needed to do the work when labour is wasted than when it is economically employed, and if *Waste* is to be considerable, there must be a correspondingly ample supply of labour. Hence the influence of Demand is very great, for whilst it is impossible under any conditions to prevent it altogether, the amount of *Waste* will vary with the state of Demand over long periods, being small when it is good and correspondingly large when it is bad. Hence the possibility of *Waste* will be closely connected with the relations that exist between Demand and other causes of Unemployment.

The development of industry has generally tended to reduce seasonal fluctuations, particularly where expensive machinery is used which has to be kept running as regularly as possible. Demand, however, has a much more potent influence on their extent and character. In very busy years, indeed, they may almost disappear. In the South of England, for instance, seasonal slackness in the Building Trades is, apart from occasional heavy frosts, the result of convenience rather than necessity, building in winter involving greater care, trouble, and, in some cases, expense, but not being rendered impossible. Now during the last boom in the London Building Trades (1895-9), employers were so busy that work was going on regularly almost throughout the year. With a poor demand, on the contrary, such as has existed more recently, the slack season begins sooner and ends later: more men are put off, and they are put off earlier in the autumn and re-engaged later in the spring. Thus whilst in any case there may be slackness in December and January, it will depend on the general conditions of trade whether this extends over October, November and February.

In like manner Demand will influence the adoption of the various alternatives to dismissal. When men are scarce and difficult to replace, employers have far greater inducement to avoid it, by working short time, by making

for stock, and by the use of the other devices already described. When labour is relatively plentiful, they are less disposed to do so. Moreover, when things are brisk, orders are more likely to be spread as evenly as possible over the whole year, and when they are slack, to be concentrated into a few months. In England, however, during recent years, the general supply of labour in many trades has been nearly always sufficient, if not more than sufficient, for the demands of the busy season, so that casual employment has been more readily utilized. A strong demand over a long period would, on the other hand, mean short slack seasons, and the regularization of employment for the purpose of economizing the labour supply.

Similarly the state of Demand can do much to mitigate or extend long-period or cyclical variations, though owing to their greater length its effect upon them may not always be so marked. A rapid expansion of it, however, will cause a depression to be both shorter and shallower. Thus the development of the Export Trade in machinery largely accounted for the comparatively low percentage of unemployment in the British Metal and Engineering Trades between 1902 and 1905. Sometimes, again, in a particular trade, district or country, manufacturers continue busy on old orders long after a general decline has set in. This happened, for instance, in some important industries in Germany during 1908. Similar reasons also cause recovery to come sooner, as in the English Motor and Cycle Trades in 1909.

Brisk Demand may further affect these cyclical fluctuations, not only by reducing their extent, but by altering their effect on the workmen. A rapid expansion of production may necessitate so much overtime that the falling off when it comes may be met largely by a reversion to normal hours. Thus the report of the British Consul-General at Berlin for the year 1908 said :—

“ This method of adjustment (i.e., the working of Short Time) to meet altered circumstances is all the easier to carry out because when trade was at its very best constant lack of well-trained and

capable workmen *compelled employers to lengthen the daily hours of labour in order to cope with the additional work.*"

In other words, a steadily brisk demand over a long period may mean that a large amount of overtime is worked in good years and only a small amount of short time in bad ones. If, on the contrary, demand is consistently slack, the reverse will be the case. Short time will be freely utilized, overtime little or not at all.

Finally, as with seasonal variations, Demand will also affect the adoption of various alternatives to dismissal and the taking of contracts at a low rate of profit will depend on two things: on whether business has previously been sufficiently good to justify this, and on whether labour is sufficiently scarce to make it worth while to keep the staff together until the return of good trade. Such influences are at best only sufficient to counteract partially the effects of a cyclical depression, but they can, nevertheless, mitigate them considerably, just as in the reverse case their absence can seriously intensify them.

So much has been said about the third main cause of unemployment, namely general irregularity and casualization, that a few words will suffice here. The intervals between the bigger jobs are likely to be longer and more numerous when Demand is slack; and whenever there is a choice between regular and irregular methods of employment, the supply of labour is likely to be the determining factor, since it requires a larger number to do a given amount of work by means of the latter. Hence when labour is scarce, more effort is made to regularize it, and its wasteful employment is only really profitable when there is an ample supply and the employer can be sure of being able to get as much of it as he requires.

Finally, there are the permanent changes in fashion or methods of production which accompany the progress of industry. When these destroy or largely reduce the market for the products or services of particular trades, a brisk general Demand can do little more than retard the resulting displacement of labour or make more easy its

absorption in allied crafts which are not similarly affected. With the smaller changes, such as the introduction of new machines, however, employers will probably get in fresh men or train up youths for the purpose, when the supply is ample, and when it is not, they will try to adapt those they already have to the new processes. It all depends upon whether new men are easy to get. It is often said, indeed, that work is more specialized to-day than in the past and that each small process or each machine has its own special group of workmen, who are not as a rule transferred to any other.<sup>1</sup> If this is true, however, it illustrates the same point. The supply is sufficient to provide each group with as many as it requires and to render unnecessary their transfer from one to another.

To sum up, therefore, the Demand for Labour affects first, not the existence, but the extent and intensity, of the other causes that produce unemployment. The briskness or slackness of Demand helps to determine the length and severity of cyclical and seasonal slackness, the amount of irregular and casual employment, and whether industrial changes shall involve permanent or only temporary displacement. Secondly, Demand influences the means and methods that are adopted to meet a shortage of employment. It affects the adoption of Short Time and making for stock as substitutes for dismissals, and, where there is a choice, helps to determine whether more or less regular methods of working are utilized, and whether men are adapted to new processes or displaced when they are introduced. Brisk Demand over a long period makes it necessary for employers to economize labour as much as possible and to keep their staff of men together by every means in their power, and so leads to better and more regular methods of employment. A slack demand has the opposite effect.

<sup>1</sup> E.g., A London Labour Exchange was asked upon one occasion to get a man to fill a certain position. Men of this type were scarce, and one was not obtained until the end of a fortnight. During the interval, however, the firm had put a man from another department to do the work. That is to say, men being scarce, it proved worth while to take the trouble to do this.

**A (ii). The Influence of the Long-Period Demand for Labour on Boy Labour and Industrial Training.**

Thus, so far as adult men are concerned, Long-Period Demand not only helps to intensify or mitigate the other causes that lead to Unemployment, but is itself at work to produce or to prevent Waste of Labour. It is, however, when juvenile workers and their training are considered that its effects in the latter direction are most marked ; and the meaning of the Principle of Waste can perhaps be illustrated best by its operation in the case of Boy Labour.

The general influence of a Defective Demand on Industrial Training is usually manifested in two different directions. It causes the skilled trades to take an inadequate share of the growing population, and so compels an unduly large proportion to enter and overcrowd the less skilled employments. Secondly, there will be Waste in all grades, because those who are spoilt in boyhood can very well be spared, and the fact that some grow up inferior workmen will be of less vital importance.

Now, under any conceivable circumstances, there is bound to be some Waste of Boy Labour, since it will never be possible to avoid altogether industrial failures or misfits. These, however, can be reduced to a minimum. Not only so, but for Waste of Labour to take place upon a large scale, there must be labour to spare and to waste. For when it is spoilt or left untrained in boyhood, it means that it has no definite use to which it can be put in manhood. In other words, it can be spared from more regular employments, and Industry as a whole can dispense with its services ; and this can only happen if the Supply of labour exceeds the Demand, and as a result there is Labour to spare. That is to say, such Waste can only be serious if Demand is defective. If labour of any kind is scarce it will have to be economized ; if it is not, it will be possible to waste it, and it will be wasted.

Thus a slack of Demand over a period of years is a powerful cause of Waste, and such Waste will take various forms. One of its results consists of the large number of boys who

grow up without trade or occupation of any kind. An example of this is given in the following quotation from the Minority Report of the Poor Law Commission :—

“ It has been demonstrated beyond dispute that an increasing number of boys are employed in occupations which are either uneducative (in the sense of producing no increase of efficiency or intelligence) or unpromising (in the sense of leading to no permanent occupation during adult life).”

This again bears out the contention that such over-employment of boys as there is, is over-employment of boy labourers, and that it is accompanied by under-employment of boy learners. Again, the same report says in the words already quoted :—

“ We regard this perpetual recruitment of the unemployable by tens of thousands of boys who, through neglect to provide them with suitable industrial training, may almost be said to graduate into unemployment as a matter of course, as perhaps the gravest of all the grave facts the Commission has laid bare.”

But for this graduation to take place on a large scale, industry as a whole must be able to spare those who grow up with their capacities undeveloped. At the present day it can, or does, afford to do without them, both as boys and as men. It is true that when trade becomes really good, it is not always possible to obtain enough fully qualified workmen to make the best of it, but the effect is never sufficiently serious and palpable to induce employers to remove its cause. The evil results are there—that is generally granted ; and one of its chief causes is the ample supply of labour, both of boys and men. This limits the proportion who can be taken as learners and increases that which is available for jobs which give employment during boyhood and “ turn them adrift at manhood.”

Further, such a shortage in Demand is likely to lead to a wasteful use of boy labour in jobs of all kinds, both skilled and unskilled, and in the former to cause many to grow up only knowing parts of their trade, or not fully masters of it, and they too will be wasted, because they too can be spared, One of two results therefore will follow. Either no training

at all is given, or bad and wasteful methods are encouraged. Instead of careful teaching, or what is often more important, regular and constant discipline, a boy is left to take his chance and "pick up" something for himself as best he may.

As regards unskilled work, this again will have two results—the one following from the other. First, in spite of all the Waste that goes on, an ample supply of boys is left to fill the less permanent jobs. Secondly, these in their turn grow up into unskilled adults and form that growing surplus of them which is so often the great problem of a large town.

These causes in their turn lead to the creation or extension of fresh forms of boys' work in order to utilize to the very best advantage the existing supply of them. The displacement of men by boys is rendered easier, and the work of boys and men is separated and specialized. Now in many ways, as Mr. Jackson has pointed out, the labour of boys is not really efficient, but when large numbers are available, it is easier and more profitable to make extensive use of them. Where, on the contrary, they are scarcer, or the demand for learners is greater, a larger proportion is drawn into skilled or permanent jobs, and they are more difficult to get and to keep for other purposes and have to be more economically used. Thus the creation of new Blind Alleys is checked.

Again, the growth in the amount of unskilled labour, whether juvenile or adult, leads the trades which employ such labour to develop at the expense of the more skilled industries. Where these trades employ mainly adult labour, the result is a change in the character of the employment, a larger proportion of the population entering low-skilled work. Where, however, they employ mainly juvenile labour, the result is to decrease proportionally the work available for adults, and at the same time to attract boys away from skilled and permanent occupations and still further hinder the growth of the latter.

Finally, increased waste of boys and men is inevitable

so long as the supply of labour continues to be ample. Employment grows more and more casual and the boys become casualized as well as the men. Thus an employer has little inducement to keep them when things are slack, or to prevent them moving of their own accord ; and they themselves, with no particular prospects and nothing to keep them in any one place, lose all idea of sticking to a job and so all steadiness. Instead of growing up regular and disciplined if unskilled workmen, they grow up fit only for the sort of casual labour which the general conditions are creating.

Similar results are likely to be found in the skilled trades. A large available supply helps very much the growth of a Reserve of Boy Labour, composed as described of those who enter trades and fail either to learn them at all or to learn them properly. Hence the *Waste* that goes on in skilled work is also large. Less regular methods are adopted which are calculated to spoil many, and that they are adopted is due to the numbers, both of boys and men, who are nearly always available.

To sum up, therefore, a slack or insufficient Demand can largely accentuate the Problems of Boy Labour. This it does, first, by rendering possible a large amount of waste, since the labour market can afford it and the employer can more safely take his chance of there being enough competent men. Secondly, this waste creates a Reserve of Boy Labour, which grows into a reserve of casual adults, both skilled and unskilled. Thirdly, it increases directly the surplus of unskilled workmen by reducing the openings for learners ; and finally, all these things in their turn encourage and perpetuate irregular methods both of employment, and training. On the other hand, a strong Demand would leave little labour to spare, and would thus tend to bring about at least a considerable improvement in methods of training.

**B (i). The Existing State of Employment in Great Britain : Among Men.**

On general principles, therefore, it appears that, both

among men and boys, a Defective Demand for Labour over a long period is likely to bring about Waste of Labour and to increase casual employment. On the other hand, a consistently Brisk Demand favours regular methods and reduces Waste to a minimum. It only remains to inquire, therefore, into the existing conditions of employment in Great Britain and into their industrial results.

Now in recent years the relation of the Demand for Labour to the Supply of it appears to have been that, apart from occasions of exceptional prosperity, the amount available is always ample, and even more than ample, for the purposes for which it is required. It is not, perhaps, quite true to say that there is a surplus of labour, because under existing methods of employment the whole supply is required for some purpose or other. But there is more than enough of it to permit the free use of the more irregular and wasteful methods of employment, and to provide for the growth of large reserves of labour, both of men and of boys. In other words, the supply is so ample as to render possible great Waste of Labour, and there is little need to economize it. For, as a rule, employers can, in spite of the waste, get all the workers whom they require. Of this there is evidence in the large reserves that are found not only in unskilled work but in many skilled trades as well, and in the very serious waste of Boy Labour of all kinds—facts which are admitted and deplored by all competent observers.

In the view of some of the very highest authorities, indeed, and notably of Mr. W. H. Beveridge, the existence of these reserves is not due to any insufficiency in the demand, but purely to existing methods of doing the work, which require a large reserve of labour always to be at hand, "either working or waiting for work." <sup>1</sup>

My point, on the contrary, is that the two things go together, and that to have such a reserve of labour, it is necessary to have a very ample supply of men, so that sufficient can be spared from more regular work for this purpose.

<sup>1</sup> *Unemployment: A Problem of Industry.*

There is, indeed, a certain amount of irregular and casual employment that is inevitable in any case, or that can only be avoided by careful public organization. Apart from this, however, casualization is largely a matter of choice. If it is necessary to economize labour, more regular methods will be adopted ; if not, probably the more casual. At present, for instance, some firms on the riverside will keep a large number of men at work for three or four days, instead of a smaller one for the whole week, to ensure a sufficiency against emergencies, whilst in the Building Trades methods of engagement are very haphazard and leave much to chance, except when trade is very brisk and labour scarce. Indeed, any approach to a shortage in this industry both could and would be met by improvements in organization. At present, however, the supply is usually such as to render them unnecessary.

Two questions have now to be considered : first, whether the Supply of Labour is so ample as to make possible, or even to cause, a great deal of waste ; and secondly, whether it is also growing more rapidly than the demand. On the first point the evidence seems to show that at any rate among the lower grades of labour such an ample supply has existed for a long time, and that if things are growing no worse, neither are they growing better. On the second point the evidence is less definite, but there is a good deal of it to prove that the amount of unemployment is on the whole increasing. The available information on these two points may be briefly summarized.

Thus the Majority of the Poor Law Commission gave vent to the opinion that :—

“ the *growth* of casual labour to its present dimensions is a modern evil.”

Again, without committing themselves to a statement as to an actual increase or decrease, the Minority said :—

“ Confining ourselves to adult men, we cannot estimate the number in the United Kingdom who are thus to-day holding no situations, continuous or discontinuous, but are existing

on casual jobs of brief duration, and who habitually do not get a full week's work, at less than between one and two millions."

Coming to detailed figures, the Trade Union percentages seem to point to an increase in unemployment in good and bad times alike. The general percentage is unreliable owing to the greatly increased representation in recent years of trades like the Textiles and Coal Mining, which meet depressions mainly by short time rather than dismissals. Fortunately, however, much more reliable figures exist in the case of the Sixteen Trade Unions which have made continuous returns since 1873, though here again the figures in some ways exaggerate the unemployment of earlier as compared with the later years. In other respects, they somewhat under-estimate them.

Taking periods of ten years, the amount of unemployment seems to have been greatest in the 'Eighties and between 1900 and 1910, and least before 1880 and in the 'Nineties. On the whole, however, the most recent period has shown the highest percentages, except in one or two branches of the Engineering Trades. This is further supported by the returns of individual Unions, which have, outside the latter group, shown considerable and sometimes marked increases in the case of almost every Union, whilst within it the same is true of several important bodies, notably the Amalgamated Society of Engineers. It should be added that in the last few years a new period of Low Unemployment appears to have begun, but the figures for the previous decade were often startling. If they do not prove a definite increase, they at least provide a strong case for inquiry.<sup>1</sup>

What has been said of unemployment generally applies also to the years of bad trade. For the sixteen Unions the percentage in 1908 and 1909 was higher than in any earlier year except 1879, though the depression of 1884 to 1887 was of longer duration. On the other hand, that of 1908-9 was only separated from the preceding period of bad trade

<sup>1</sup> For more detailed figures see Appendix IV

(1902-5), a long but shallow one, by two years, in which there was still considerable unemployment. The Engineering Trades were as a rule as badly off both in 1879 and in 1884-7 as in 1908-9.<sup>1</sup> Two of the other three groups however, showed an amount of unemployment in the latter years considerably in excess of that of any previous period, and in the third case, the Woodworking and Furniture Trades, the percentage of 1908 (8.3) was only equalled in 1879.<sup>2</sup>

The increase in unemployment, indeed, has been less marked recently in years of extreme depression than it otherwise might have been, because of the operation of two causes. First, the number of actual dismissals has been reduced by an increase, in industries like Engineering, of the practice of working Short Time. In 1904, the Second Fiscal Bluebook stated that "the shortening of hours in times of slack trade is not prevalent in most districts in the engineering trades," and held that in them the total amount of short time was small. In 1908-9, however, the monthly returns of the Labour Gazette showed that it was very common in three at least of the more important districts—Lancashire, Yorkshire and Scotland—and that it was also utilized in some others. Thus a larger share of the total loss of employment appears now to be met in this way than was the case formerly, and this has tended to reduce the percentages of unemployment compared with earlier years.

Secondly, allowance must be made for the growth both in the numbers and proportions of Trade Unionists who are in receipt of Superannuation Benefit. These are largely affected by the conditions of trade, since bad trade makes things more difficult for the older men and compels larger numbers of them to go on superannuation. Now the per-

<sup>1</sup> With one or two exceptions individual Unions show as high or higher percentages in 1908-9 as in almost any previous year, but owing to the different rates at which their membership has increased, the percentage for the whole trade is higher.

<sup>2</sup> For the two years 1908-9 the percentage was 8.0 per cent., as against 6.4 in 1878-9, 4.4 in 1885-6, 4.3 in 1893-4, and 5.8 in 1903-4.

centage of men receiving such benefit in the Unions that have made returns continuously since 1892, rose from 1·5 per cent. in that year and 2·0 per cent. in 1901 to 4·0 per cent. in 1910; and judging from such information as is available, there was an appreciable increase also in the years preceding 1892. It is significant too that between 1901 and 1910 the percentages in the Building Trades, where the depression was exceptionally severe after an equally unprecedented boom, rose from 1·1 to 3·8, whilst in other trades the rise (from 2·7 to 4·1) was considerable, but much less marked.

The increase itself is due mainly to the much larger number of members who have qualified latterly for this benefit, and therefore it does not necessarily show that it is more difficult for old men, as such, to find employment. The point, however, is that the increasing numbers provided for in this way are kept out of the labour market. In previous years some of these men would no doubt have maintained themselves by their savings, or have come on the Poor Law; but the majority of them, by competing for work, would either have themselves swelled the percentages of unemployed in their trades or else have forced others into them when they themselves succeeded in getting work. Hence allowance has to be made for the fact that since 1907 about 35 per 1,000 workmen in various industries have been taken out of the labour market in this way as against 15 per 1,000 or less previous to 1892. Thus consideration of these two increases, in short time and in the numbers superannuated, shows the present position to be even less favourable than it appears on the surface.

Perhaps, however, the most significant fact of all is the growth in the amount of unemployment which has been exhibited in the two years of good trade in 1906 and 1907,<sup>1</sup> when the percentage was almost twice as high as in any previous period of boom. The state of employment in good years is perhaps the best criterion of whether the

<sup>1</sup> This experience has not been repeated in the present year (1913), when the percentage has fallen almost to the same level as in 1900.

demand for labour is sufficient fully to absorb the supply, or whether it is growing so slowly as to render possible an increasingly wasteful use of it. For a growing amount of unemployment in good years means an increase in the numbers who are unemployed, or under-employed, under almost any conditions.

Now it is significant that in 1906 and 1907 not only was the general percentage much higher than ever before during the prevalence of good trade, but that, with two exceptions,<sup>1</sup> the same is true of every individual Union for which returns are available since 1873. Now even if, in some cases, changes in methods of calculating the percentage cause the amount of unemployment previous to 1892 to be slightly under-estimated, the increase in 1906-7, nevertheless, is considerable.

Had this increase in the amount of unemployment in good years proved itself to be a permanent feature of our industrial development, its seriousness could hardly have been exaggerated. Happily, however, the recent boom in trade marked a return to the conditions that prevailed previously. The percentages were 2·5 in 1912 (in the months not affected by the Coal Strike) and 2·1 in 1913, as against 2·0 and 2·4 in 1899 and 1900, the increase being thus very slight indeed.

What happened in 1906 and 1907, therefore, may prove to have been quite an isolated occurrence, of which there will be no repetition. Against this, however, has to be set the enormous emigration of the last few years, and the great rise in the number of superannuated Trade Unionists. And after all allowance has been made, the high percentages of 1906-7, even if they should not recur, do constitute a case for enquiry as to whether the demand for skilled labour is keeping pace with the supply.

With unskilled labour again there is evidence of a growing

<sup>1</sup> The Associated Ironmoulders of Scotland and the Typographical Association, and in their case the percentage of 1906-7 was only exceeded on one previous occasion, in 1882-3 and in 1899-1900 respectively.

excess in certain directions, but not enough to constitute conclusive proof as regards the whole of it. Thus of Dock Labour in London the following facts were reported to the Poor Law Commission in 1907<sup>1</sup> :—

“ So far as could be ascertained there appeared to be a general opinion that in the prospects of employment at the Riverside there had been a considerable change for the worse in the last ten or twelve years. . . . In 1891–2 the number of those competing for work has been stated (Life and Labour of the People) at about 22,000, the number of those needed under the conditions then obtaining as 20,000. In a later passage of the same work it was said that there appeared ‘ to be good work actually for 14,500 to 15,000, or, allowing for sickness and unavoidable friction, for 16,000 men.’ A representative of the men referring to the same four classes of riverside labour . . . states that ‘ while these figures may have been correct when the book was published, they would not be applicable at the present moment.’ . . . When pressed he said that without pretending to exactness, he would put the number at present competing for work at not less than 30,000. After a careful investigation he said that he placed the lowest number employed at 9,500, which would increase at busy times to a maximum of 13,000.”

Fuller information might show these estimates to be incorrect, but as they stand they are significant. For whilst decasualization and the use of improved machinery have reduced the men required, they have not led to a decrease in the number competing for work, but on the contrary, have been accompanied by a large increase in it. So too of employment at the Liverpool Docks the same report says <sup>2</sup> :—

“ Sometimes, again, it is said that the steamship companies cannot get men, or at least . . . men worth engaging. Both these criticisms are to a certain extent true, *although perhaps the latter is less so than formerly*. There is *now*, as more than

<sup>1</sup> Report of Mr. A. D. Steel-Maitland and Miss Rose Squire on the Relations of Industrial and Sanitary Conditions to Pauperism. Poor Law Commission, Appendix XVI, p. 39 (46 and 47).

<sup>2</sup> Ibidem, p. 81 (25).

one person has told us, 'a permanent surplus of labour.' Again, in the words of a superintendent relieving officer, 'there were a good many more *now* seeking work than there is work to offer them. If the Docks were at their busiest, all the men willing to work could not be engaged.'"

The latter statement, however, no longer holds good, since the Liverpool Docks have suffered from a shortage of labour in the last two years. London dock labour, on the other hand, seems to show a growing number of workmen competing for a diminishing, or at least stationary, amount of employment.

When we turn to consider the other trades which largely utilize casual labour, definite figures are less easy to obtain. In the Building Trades, which, next to the Docks, appear to provide the largest market for it, the proportion of the workmen who are casually employed seems undoubtedly to have increased,<sup>1</sup> whilst even in the great boom of 1895-9 there was no real shortage of labour in the trade, though what there was had to be more economically used. Again, looking at the matter from a slightly different standpoint, the absorption of boys in many forms of purely uneducative work seems to be growing, but at the same time there are few signs of shortage, either of skilled men or of learners for skilled work. In other words, it appears to be possible to waste a large and growing number of boys in juvenile Blind Alleys and of men in unskilled casual labour without paying the price in a lack of trained mechanics.

The evidence, therefore, suggests that in all classes and grades of work the supply of labour has for a long time been sufficient to enable large numbers of men to be wasted by casual labour or in other ways. As to whether these numbers are increasing, on the other hand, the evidence is not conclusive, but it appears to suggest an affirmative answer, though the growth may not be very large.

<sup>1</sup> The numbers employed in this industry declined considerably between 1901 and 1911. Hence this particular growth is relative rather than absolute.

### **B (ii.) The Existing State of Employment : Among Boys.**

Finally, it is necessary to consider the same question in relation to Boy Labour and to ask whether there is a shortage or excess of it, either generally or in any particular form. The question, in fact, is this. Making a reasonable allowance for friction (i.e., sickness, accident, or necessary loss of time between one job and another), is there or is there not enough work to keep all the boys regularly engaged throughout the year ?

So far as good permanent openings are concerned, whether to learn skilled work or in the better class of semi-skilled jobs, there are undoubtedly more boys available than can find places. This is to some extent inevitable since there will always be some with ambitions in the direction of a skilled trade who do not possess the capacity for it. But allowing for this, there are, in London at any rate, undoubtedly more who are fit to become skilled workmen than can actually do so. •

In some important London industries, indeed, notably Printing and Engineering, there is a good demand for learners, but in others, notably in Building and the better-class Furniture Trades, it is very small indeed. Taking it as a whole, therefore, the Demand is decidedly deficient. Men are wanted, not boys, who are often found to be a nuisance, and what is more, the men are usually obtainable.<sup>1</sup> It should be added that this tendency is more marked in London than elsewhere owing to the large supply of adult labour that comes into it from outside.

Now these facts are far stronger evidence of a shortage in the demand for learners than any mere surplus of boys applying for such jobs could be. What is important is that comparatively few are needed or required to fill these posts, and yet in spite of the inadequate number that they

<sup>1</sup> The Manager of a firm of Wire Goods Manufacturers said :—  
“ I have no need to take an apprentice. If I have a vacancy there are always plenty of those poor devils outside who are only too glad of a job.”

train, and the waste of good material even among these, the employers can nearly always get a sufficiency of men, though it is true that really good ones may be scarce. The employers, therefore, want men, not boys, and they are able to have them. Thus, even allowing for the provincial influx, the small number of learners is significant. Nor must it be forgotten that the districts from which this outside labour is obtained probably could not train all the boys that they do, nor provide for them when they are trained, but for the openings afforded by London.

Nor is this due to any difficulty in getting boys for skilled work. On the contrary, in London nearly all firms can get quite as many as they need and many can get them several times over, not only in trades where few are taken, but in others, such as Printing and Engineering, where their services are fully utilized.<sup>1</sup> Such troubles as there are, are due to special circumstances, like the need for a particularly high level of ability, the offer of very low wages, or the bad reputation of a firm. Associations for placing boys, again, have often great difficulty in finding such vacancies, little or none in filling them, and it is often only by the most vigorous efforts in enlisting the sympathies of employers that they can create any demand at all. The Labour Exchanges, indeed, experience some trouble at times owing to the high wages demanded by the boys themselves, but apart from this have little difficulty in obtaining more than they require.

As regards other towns, the matter is not so clear. In them, too, there is probably a shortage of vacancies for learners and a surplus of boys to fill them, but it is less considerable. In his report on Boy Labour made to the Poor Law Commission, Mr. Cyril Jackson summarized the answers of employers to the question "Is there any difficulty in getting boys?" as follows:—

<sup>1</sup> If there is any difficulty it is brought about by the restrictions imposed by Trade Union rules, and not by shortage of boys, nor in many cases are these rules unduly strict. Not seldom they are decidedly generous.

|                       | Yes. | No. | Doubtful. | Proportion of<br>Affirmative to<br>Negative Replies. |
|-----------------------|------|-----|-----------|--|
| London . . . . .      | 13   | 164 | 9         | About 1 to 12½                                       |
| Other Towns :—        |      |     |           |  |
| Textile Trades . . .  | 18   | 29  | 9         | „ 3 „ 5  |
| Other Trades . . .    | 45   | 183 | 40        | „ 1 „ 4  |
| Total (other Towns) . | 63   | 212 | 49        | About 1 to 3½  |
| Whole Country . . .   | 76   | 376 | 58        | About 1 to 5   |

The trades employing mainly unskilled labour rarely suffered from a shortage, and in other cases it is probable that any difficulties were due rather to questions of capacity or of wages, or to limitations of numbers by the Unions, than to an actual scarcity. Again, the experience of London suggests that they may have consisted chiefly in finding means to bring employers and boys together. That there is any real shortage of the latter for good work anywhere is more than doubtful, and Mr. Jackson's returns would probably have been even more emphatic on the point if they had been made in a period of bad trade, not, as they were, during a boom.<sup>1</sup> It seems, therefore, that there is in London a large surplus available for skilled work, and outside it a smaller but still considerable one.

As regards unskilled boy labour, on the other hand, a definite answer is less easy to give. Complaints by employers are frequent, whilst there is often considerable unemployment, more particularly among the older boys. Reference is also made both to their restlessness and their general behaviour, and probably the trouble experienced by the employers arises less often in getting boys than in keeping those whom they have got. A recent comparison

<sup>1</sup> The Returns were made in the latter half of 1906, when the boom of 1906-7 was at its height.

of the Labour Exchange Returns in four Yorkshire towns showed in one a large, and in a second a considerable, surplus, and in two others there was no surplus at all. In both these last, however, the special circumstances of the Textile Trades created an unusually large demand.

In London, the managers of some Exchanges find at times a difficulty in procuring all the boys they want, whilst others have more on their books than they can place. The shortage, however, is often only temporary and sometimes apparent rather than real. Spasmodic demands take place, for instance, which are too large to be satisfied at short notice. Many lads also fail to use the Exchanges at all, and employers have other means of getting those they require.<sup>1</sup> The demand for unskilled boy labour, therefore, though often brisk, is seldom so brisk as to outrun the supply, and a shortage at the Exchanges may well be concurrent with insufficient work to employ fully all those who need it.

On the other hand, there is much direct evidence of a surplus of boys for unskilled work. In London there are usually some thousands who remain unplaced on the Exchange Registers at the end of each month, the number only falling below 2,000 in two out of twelve during 1911, whilst some who do not continue registration undoubtedly remain unemployed for a longer or shorter time. In Mr. Jackson's return, again, few if any of the firms employing a lower grade of boy labour had any difficulty in getting as many as they wanted, whilst there is much evidence in other directions to show that there is considerable unemployment among older boys, and even among lads between fourteen and sixteen, with whom such shortage as exists is to be found. A recent inquiry, for instance, into the occupations of boys who had left a number of schools in London showed a considerable proportion (over 6·0 per cent.) of those between fourteen and fifteen to be unemployed, or at

<sup>1</sup> E.g., one man said that his son "was sent up by the Exchange to a job and found a whole line of boys waiting there, and when he tried to push his way further up, got a clout on the head for his pains."

least unoccupied.<sup>1</sup> Finally, there is little doubt that many parents experience considerable difficulty in finding their sons places at all, or are so afraid of not finding them anything, that they snatch at the first opening, however unsuitable.

All these facts, therefore, suggest that any trouble in obtaining sufficient boys is not due to a shortage of them, but to other causes. Partly it is due to the difficulty of bringing employers and employed together, and still more to inability to utilize the available supply. Boys are restless and continually on the move, employers as a result make little effort to keep them, and casual methods of employment grow up. Hence there is considerable and unnecessary waste of time in moving from job to job, and in the unemployment, often for long spells, of so many lads; and could reasonable regularity be secured, and the supply be economized instead of squandered, there would probably, some few towns excepted, be more than enough for all requirements.

Nor does such shortage as exists justify the idea that it has any counterpart among adult men. For most of the more permanent jobs, whether in skilled or low-skilled work, there appear to be more than sufficient boys. It is in those which employ boys, and boys only, that an adequate number is hardest to secure. The greatest demand, in short, is not for boys to make into men, but for boys who will be required only for so long as they remain such. The direct displacement of men by boys is a comparatively small part of the problem. Far more important is the fresh creation or more rapid growth—chiefly in the distributive trades—of forms of work which utilize the large supply of boys. This too contradicts the idea of a real shortage; for unless enough and to spare are already obtainable, all will be absorbed in existing employments. It is when the supply is more than ample that new uses are found for them, and

<sup>1</sup> R. A. Bray, "The Apprenticeship Question" (*Economic Journal*, September, 1906, pp. 404 *et seq.*). This, however, would be partly accounted for by boys who had just left school and not yet started work, and partly also by those of whom for various reasons no information could be obtained.

have to be found if their labour is not to be wasted altogether. What does happen is that difficulty arises from their restlessness and lack of discipline, which further reduces the demand for learners, and in other ways causes more than need do so to enter and remain in unskilled jobs.

Hence, though the fact is partly concealed by the waste and loss of time that goes on, there appear to be more than enough boys for all kinds of work, and a considerable surplus for positions which require or impart skill. The result is a state of affairs similar to that described in connexion with adult unemployment—namely, a sufficient supply of them to permit of the free use of irregular and wasteful methods of employment and training. And there is also an increasing creation or extension of pure boys' jobs.

So too a really strong demand for boys would have similar effects to those which arise in the case of men. The need for economizing the supply would lead to the substitution of better and more regular methods for existing ones. These methods would in time become as habitual as present ones are, and they might become so much a habit as to be less affected by future changes in the demand. Thus in Berlin, where the absorption of apprentices, learners and others in permanent positions is, in proportion, very much greater than in London, the result has been to check the growth of Blind Alleys.<sup>1</sup>

### III. SUMMARY.

To sum up, therefore, it would appear, first, that on general

<sup>1</sup> E.g. "Berlin, though growing luxurious, is not yet so spendthrift of its young life as is London. The newspaper boy and the child street-trader are unknown. The errand boy and the errand girl, it is true, are on the increase, but the middle-class housewife still goes herself or sends her maid-of-all-work to bring home the daily marketings. Shopkeepers, as a rule, do not call daily for orders, or deliver customers' goods daily. Where a van or a cart is sent, a van boy is unusual. If a second is carried on a van, he is generally a man. The telegraph and messenger services are usually performed by men (ex-soldiers), not by boys" (Report to the London County Council by Miss F. Hermia Durham, on Juvenile Labour in Germany).

principles a Defective Demand for Labour over a long period is likely to lead directly to *Waste* and to increased irregularity of employment both for men and boys, and that a Strong Demand is likely to reduce both to a minimum ; and, secondly, that as a matter of actual fact, there is such a Defective Demand in Great Britain, and that it is leading to irregular methods of employment, bad methods of training and *Waste of Labour*.

Thus the same results are found to follow from the influence of Demand as from that of the system of Training. Bad and haphazard methods in the latter case, slackness or insufficiency in the former, are both potent causes of unemployment and of the growth of casual labour ; and both of them seem to be in active operation. They further exert a mutual influence upon one another. Methods may be so bad as to deteriorate more or less seriously the labour of a trade, and so to restrict or hinder its development. In other cases, the shortage of good men can be got over by adopting alternative means of production, or by the growth of a reserve of men and boys. So too a slack Demand is a fruitful parent of bad methods. What often happens is that deficiency of Demand produces these and a waste of labour. They in their turn cause a decline in the quality of the workmen, who of necessity become less valuable to the employer ; and this still further restricts Demand.

So the two are often in operation at the same time, and vary in extent together. Hence full benefit cannot be obtained by a change which deals only with one and not with both. Inferior teaching has checked Demand ; a superior training will encourage it by increasing productive and purchasing power. Moreover existing methods have become so habitual that it is doubtful if increased demand by itself will bring about a thorough change in them. A definite and consistent effort will probably be needed.

On the other hand, without an improvement and extension of Demand, the restoration of a good system of training, though not impossible, is likely to be long and difficult. This it must almost necessarily be so long as haphazard

methods involve less trouble to the employers and yet provide them with sufficient labour of an adequate quality. For a rapid improvement, therefore, an increasing Demand for Labour is essential. For this alone can create conditions, under which *Waste of Labour* is likely to produce a shortage, and better Training to prove not only profitable but necessary. For the latter involves thought, trouble and expense ; but where labour is not more than sufficient, still more where it is scarce, these are found to be well worth while.

## CHAPTER XVII.

### EXISTING AGENCIES AND CURRENT PROPOSALS.

#### I. EXISTING AGENCIES.

#### II. CURRENT PROPOSALS.

- I. EXISTING AGENCIES.—Three Propositions to be laid down respecting existing Agencies for placing and supervision—Classes of them—Head Teachers—Value of Their Work—Its Limitations—Work of Day Trade Schools—Work of Evening Classes—Work of Clergy and Parish Workers.

Apprenticeship Charities—Their Nature and Work—Apprenticeship Associations—Illustration from work of Skilled Employment Associations—Their Organization in London—Their Aims—Policy regarding Indentures and Premiums—Bargaining for Higher Wages—Control of Boys during Service—Educational Work among Parents and Employers—Limitations of their Work—Its Defects—Other Similar Institutions—Statistics of Work of Skilled Employment Associations—The Plumbers' Company and Apprenticeship—Boys' Homes—Clubs and Brigades—Latter mainly engaged in Control and Supervision.

General Organization of Exchanges and Care Committees—Work of the Latter in Detail—And of the Former—Individual Supervision Mainly in the hands of the Care Committees—Similar Schemes Elsewhere—The Edinburgh System, established under the Scotch Education Act of 1908—The Birmingham System—Question of whether the Organization shall be controlled by the Education or the Exchange Authority—Three Main Elements in all systems: the Exchange, the Advisory Committee, the Care Committee—Different Forms of Supervision.

The Trade Unions—Regulation of Conditions of Teaching—The Number of Apprentices—A Fixed Proportion of Boys to Men—A Varying Proportion—No Limitation of Numbers—Fixing of Period of Service and Starting Age—Various Regulations—Little Regulation of Wages paid to Apprentices—Hours and Overtime the Same as with Men—Attitude towards Trade School—Waning Hostility and Growing Approval—Little Means of Active Support—Generally Position does not usually permit of their taking a very strong line in any direction.

II. CURRENT PROPOSALS.—The Majority Report of the Poor Law Commission—More Comprehensive Proposals by

Mr. Cyril Jackson in his Report to the Commission on Boy Labour—Criticisms of both these Policies and suggestions for Improvement—Scheme of the Consultative Committee of the Board of Education—Mr. Seebohm Rowntree's general suggestions—His Scheme for Unemployed Juveniles—Detailed Criticism of it—Proposals of the Home Office Report on the Labour of Van and Warehouse Boys.

Scheme of the Minority Report of the Poor Law Commission: Industrial Half-Time—Advantage of the Scheme—Objections and Difficulties—Summary of them—Conclusion.

FULLER reference is now required to those existing agencies whose purpose it is to place boys in employment and control them at their work. Strictly speaking, these should include Trade and Technical Schools, but they have already been fully dealt with, and will only be mentioned further in so far as they assist in starting and in supervising them. In the first half of this chapter, therefore, I propose to describe briefly the chief of these agencies, their aims and their methods, and in the second to comment upon some of the more important proposals for dealing with the problems of Boy Labour.

### I. EXISTING AGENCIES.

As regards the former, three propositions may be laid down. The reorganization of the system of Care Committees in 1908, and the establishment of Juvenile Advisory Committees of the Labour Exchanges, beginning in the autumn of 1910, marked the first serious attempt to deal with the juvenile population of London as a whole. Secondly, there existed previously various institutions and individuals concerned each with some part, but not with the whole, of the problem, who were more or less organized each for some particular purpose. Hence boys and girls were either left to the uncoordinated control of a number of societies, or were under no control at all. Thirdly, with some few exceptions, these agencies have usually dealt with one or other of the twin problems of placing and supervision, but not with both together; and neither of them is likely to be fully solved, so long as it is dealt with independently of the other. For complete success, therefore, all the bodies

concerned must at least be under a common, central authority, and this is what the new system is attempting to secure.

Existing agencies include first those individuals, such as school teachers, who possess definite positions in connexion with boys and, as a result, interest themselves in starting them in life; secondly, societies whose primary object is to place them in skilled trades by Apprenticeship or otherwise; thirdly, those Lads' Homes which seek as part of their duties to find suitable work for their boys; fourthly, Lads' Clubs, Brigades, Boy Scouts' Troops, and similar bodies, which are chiefly occupied with supervision; and lastly, the Trade Unions, so far as they attempt to regulate the conditions of juvenile employment.

Among individuals more is perhaps done by the headmasters and teachers in the Elementary Schools than by any others. They know the boys well, sometimes intimately. The work done in school and at manual training gives a rough and ready test of capacity, though the lad who does well at school is not always so successful outside it, and those with push and smartness may do better than the quiet, industrious boy of more real ability. With all their limitations, indeed, the head teachers are better situated for dealing with the matter than almost any other individuals. Those of them who are well known often have quite a connexion among firms of good standing, who send to them when they want a lad, and in this way positions of a permanent character are often at their disposal.

The value of their work, however, is limited in many ways, and as a rule they can only provide for some and not all of their boys. Too much, again, depends on the personality of each man. Some, a minority it is true, are by no means willing to undertake all the extra work that is involved, whilst a teacher's connexion with employers is a purely personal one, and apt to be lost on his retirement. And there are even more serious difficulties. He cannot in many cases know, or test, the quality of the work that is offered, and has to risk its turning out badly. Further,

he cannot do more than place the boys. To supervise them after they are placed is quite beyond his power, and this duty is now being undertaken by the Care Committees. Again, having only those who are leaving or about to leave his own school to select from, he has not always a suitable one for a particular job. Nor is he in a position to wait, since the firm must usually fill the place at once, and if a boy is not forthcoming will go elsewhere and perhaps offer no more vacancies in the future. Hence he has to send the best available, whether he is really fitted for it or not. On the other hand, a Labour Exchange with a number of schools to draw on will be much better able to give employers a wide selection. Moreover, if both the Exchanges and the teachers are doing the same work, confusion and overlapping may result. Until, however, the former are more fully developed, the latter should be encouraged to continue their work, but they should notify to the Exchanges the positions that they fill, and where possible send to them those which they cannot provide for satisfactorily.

In this connexion mention may be made of the Day Trade Schools, since they possess special facilities for placing their boys. In their trade teaching they are confined to a particular industry and its allied branches and are usually situated in districts where these are extensively carried on. The Principals and Instructors, therefore, have as a rule a considerable knowledge of them. The pupils are a picked lot and consequently above the average in ability, they have usually shown special aptitudes for this industry and select carefully the branch of it to which they will go. The chief difficulty lies in the doubts and, in some cases, prejudices of employers and in the legacy of past mistakes, but these are being overcome. Thus in one case all who had passed through a certain School were doing well with one exception, due entirely to the lad's own fault; in another the support of employers was difficult to get, but once obtained was usually continued and extended. A third had a clientèle of some twenty businesses of good standing, who always sent to it when in need of a learner.

These Schools, moreover, assist indirectly in the supervision of the earlier years of employment, since most of their boys continue to attend Evening Classes after they leave. Similarly, the ordinary Trade Schools do much to help their students in this way, especially in guiding those who are migrating from job to job. But here again, both in placing and control, their work, and more particularly that of the former, is limited to a comparatively few picked boys. The Evening Trade Classes, indeed, get into touch with thousands, but even these include but a small proportion of the whole, and an even smaller one of those who need them most. Nevertheless, within these limitations they do most valuable work.

Finally, the Clergy and parish workers also help to find situations, but do so under circumstances that are less favourable than those of the school teachers. They have not the same knowledge of a boy's attainments, nor as a rule so many boys to select from, and sometimes get only the unsuccessful and the unruly ones to deal with. In individual cases, however, they often give great assistance, and usually continue to exercise supervision for far longer than the master can, since their connexion with a boy does not terminate when he leaves school.

The second kind of agency consists of Apprenticeship Societies and Apprenticeship Charities. The latter are still very numerous and possess a large total income, the objects in which it may be spent including often the provision of tools and outfit as well as the payment of premiums. Many of the individual Charities are very small, and quite unable to provide properly either for the selection or the oversight of their boys, and the decrease in the use of the indenture, and still more in the payment of premiums, has caused a large number of them to divert their funds to the other purposes, for which provision is made in their trust deeds. Moreover, advantage is apt to be taken of them by firms who employ apprentices for the sake of the premium, or who do not normally demand or accept one. Where, however, they seriously carry out their work of placing and

supervision, they can achieve similar results to those accomplished by the Apprenticeship Societies.

The latter vary considerably in their objects and methods. For instance, the Skilled Employment Associations and similar bodies deal with all classes of boys and all skilled trades. The Jewish Board of Guardians, on the other hand, confines itself to members of its own religion and, in practice, mainly to certain occupations. All, however, endeavour with more or less success to select suitable ones, and to supervise their boys during their period of service. Their work, however, may best be illustrated, and illustrated at its best, by a description of the Skilled Employment Associations.

In 1909-10<sup>1</sup> there were in London Local Committees in fifteen different districts. These were separately administered, and to a great extent separately financed, but were under the control of the Central Association, which carried out much of the more general work, such as the canvassing of employers and the conducting of inquiries into the methods obtaining in various trades. Similar Associations in other parts of the country are affiliated to it. Since that date, however, many of the Local Associations have been absorbed in the Juvenile Advisory Committees of the Exchanges, where such have been established, and their workers to a great extent continue their work as part of the new organization.

As their name implies, they aim at organizing generally various methods of training for skilled employments, and do not confine themselves to Apprenticeship. Occasionally they fill some situations outside the ranks of skilled labour. Where possible, a binding agreement is entered into, usually for five years, the Associations being a party to it and reserving the right to break the indenture on due cause being shown. By this means they have succeeded in overcoming one of the great difficulties of formal Apprenticeship—that, namely, of getting rid of an unsatisfactory boy or of removing

<sup>1</sup> This year is taken as being the last completed year before the coming into operation of the Labour Exchange Act (1909).

one from an unsatisfactory firm. Where possible, a clause is inserted to allow time off for attendance at Technical Classes on one or two afternoons a week, and where a premium is paid, this is usually insisted upon. The Associations will also accept a verbal agreement, and the proportion of learners to apprentices is about one to two. Such agreements, not being legally enforceable, are more often broken than are the indentures, employers and boys being about equally to blame. Often small difficulties and troubles are magnified until one of the parties throws the thing up in disgust. Here, however, thanks to their power of supervision, the Associations can step in and set matters right, before they have gone too far. On the other hand, their work has not extended to those who are learning by Migration.

Payment of a premium is avoided as far as possible, and many firms are found who neither insist upon, nor even desire, one. Where it is paid, return in the way of "time-off" or of higher wages is usually provided for, and in this way trades where the work is specially fine or delicate, or boys whose home circumstances necessitate a high initial wage, can be satisfactorily dealt with. Usually such payment is not necessary to secure a reasonable rate. Finally, the premium is, as a rule, paid in two parts, at the beginning, and half way through, the period of service, and the amount is repaid by the boy, nearly always punctually, in small weekly instalments.

The Associations are further able to do something in bargaining for adequate wages, and the results of their efforts have, on the whole, been most gratifying. Some of them have been able to obtain starting rates of 5s. a week in most trades without a premium, and have saved their boys from having to accept for the first two years such as are little more than nominal. At the same time their powers in this direction are limited to some extent, since employers can, if necessary, get apprentices elsewhere. Still they are increasingly recognizing the value of the Associations to them, and as a result are offering more

favourable terms. Shorter periods of service are also arranged for in certain cases. Five years, and less frequently seven, are still sometimes necessary, but at others a boy cannot spend more than three or four years profitably in the same place. Here, under proper safeguards, a Short Apprenticeship followed by Migration seems to be the best policy, and some employers already adopt it. So, too, some at least of the Associations accept and even prefer it, and use their powers of supervision to minimize the dangers of its abuse.

The other side of their work consists of general assistance to, and control over, the boys. To begin with, their capacities are carefully tested, and efforts are made, often successfully, to induce them to enter trades that are suited both to their health and ability. Thus those who wish to enter an unsuitable one, are offered a more likely post with the alternative of placing themselves, and those who possess the ambition but not the capacity for skilled work, can sometimes be dissuaded from taking it up, and a few of them are put into good positions of a low-skilled character. Further, in addition to those whom they place, boys resort to the Associations simply to obtain advice.

After being started, a boy is kept under regular supervision. The home is visited at more or less fixed intervals, often with the result of improving home conditions. The employer is also periodically visited and, where necessary, is kept up to his side of the agreement. Reports of progress at Trade Classes are obtained, and throughout his time the learner is well looked after and when it has come to an end, may even be further assisted to complete his training.

Finally, these Associations do most useful educational work. They bring home to the parents the character of different jobs and the dangers attending them, and enable them to provide better for their boys than they could do for themselves, supplying that knowledge and information which so many cannot otherwise obtain. Further, they interest employers in the matter and even create a greater demand for learners. In connexion with this, the value

of what they do in filling jobs with more suitable boys is admitted ; but it is sometimes denied that they can increase the demand for them. That more could be taken in London, is proved by the extent of the provincial influx, and in trades where there is a shortage of competent men the teaching of more learners would be likely to promote their development. And to some extent the Associations have actually increased the number of openings, either by inducing employers to take them, and those, who only take a few, to take more, or by persuading others to reconsider a decision to give them up. Frequently, too, they interest them in a particular boy, and not seldom a man, who has had one in this way, will afterwards have others. This work, however, is only in its infancy, and should in time be much extended by the Juvenile branches of the Exchanges. Apart from this, its value in interesting employers in matters of training has been very considerable.

The Skilled Employment Associations have been chosen for detailed description because with them the work of this class of agencies has reached its highest development. Among such Societies they have adopted the best methods and achieved the best results, and realizing the need for variety in their methods to suit different conditions, they have avoided the rigid insistence on particular forms that has been apt to mar the policy of others. Indeed, on a small scale they have pioneered the work that is now being taken over by Juvenile Labour Exchanges.<sup>1</sup>

Nevertheless, their work has had many necessary limitations. They have only been able to deal with a few hundred boys and girls annually, and the same thing is true of other similar institutions. They have confined themselves almost entirely to skilled labour. They have found great difficulty in many cases in getting the support of employers, and especially in getting a grant of "time-off" to attend classes.

<sup>1</sup> This expression is used for the sake of brevity. Technically Juvenile Advisory Committees are attached to the branches of the Exchanges that are dealing with workers under seventeen years of age.

Moreover, their methods and personnel have come in for considerable criticism, some of it legitimate, some of it unfounded. Their most important positions are, as a rule, filled by experienced social workers, but many of the details have to be carried out by young and inexperienced persons, with the result that mistakes are inevitable, and complaint is sometimes made that they do not utilize fully the means of information that are available.

Even more serious is the criticism that too great attention is paid to obtaining an indenture accompanied by payment of a premium, and not enough to ensuring the quality of the teaching, and in one case it was stated that, "provided they could place a boy out with a premium, they are satisfied." This, together with the indenture, is thus treated in some cases as a sort of talisman, and chances to learn under less formal, but otherwise equally good, conditions are neglected. Where this attitude is adopted, therefore, they play into the hands of those firms who take boys as apprentices for the sake of the premium, or use the opportunity to get a premium for which in other circumstances they would not ask. Or, again, it may be paid to induce an employer to take an unsatisfactory boy to the possible exclusion of a better one. Such complaints have been and are still raised against Skilled Employment Committees and in the past there was some considerable justification for them. They have, however, learnt by their mistakes, and in this and other cases have largely, if not entirely, removed legitimate causes of criticism, and such criticisms are, as a rule, far less applicable to them than to other similar agencies.

Again, complaint is raised concerning the failure of some other Institutions to adapt themselves to modern conditions, but this fault cannot now be debited to the Skilled Employment Associations. For so far as their resources permit, they do adapt themselves to the requirements of different firms and trades, even placing boys in temporary unskilled work to await better openings. Other bodies, however, practically refuse to adopt any method but that of

indenture, premium and sometimes seven years' service. Now, owing to the varied conditions of modern industry, one form of engagement cannot suit all circumstances, and to insist invariably upon it, is to neglect good openings of other kinds, and put some boys in less good positions than might be obtained for them.

The work of the City Companies in connection with Industrial Training may next be considered. The great majority of them have confined themselves to giving support and assistance to Technical Education, sometimes generally and sometimes for the purposes of the particular trade to which they belong. The work varies from one Company to another, and some do a very great deal in this way, but with one important exception they appear to limit themselves to it. That exception is the Worshipful Company of Plumbers, which perhaps does as much as any other to provide for Technical Education, but has also established and supported a scheme for securing a uniform and well-considered system of Industrial Training.

The movement for the Registration of Plumbers was first started in 1886. On fulfilling certain conditions, plumbers, whether masters or workmen, are entitled to be registered, and arrangements are made for the marking of all work done by them, so that it receives the guarantee that it has been done by qualified and responsible men. To obtain registration a plumber has to have passed certain specified examinations and to have received such a training as is recognized by the Company. This may take several forms :—

- (1) He may serve with a qualified firm a minimum of five years' Apprenticeship under an indenture, one of the conditions of which is that he shall have made adequate attendance at Technical Classes.<sup>1</sup>

<sup>1</sup> The Indenture form adopted by the Company states that " the apprentice shall attend and diligently study at the Evening Classes of any Technical Institution or Trade School now or hereafter to be established in London as his master shall direct and as shall be approved by the Plumbers' Apprenticeship Board." The master undertakes to cause the apprentice to make such attendance.

- (2) He may under certain conditions serve his time under the supervision of different firms.
- (3) In the case of those who enter the trade in other ways than by Apprenticeship, Registration may also be obtained, but the tests to be satisfied are more severe than in the case of Apprenticeship.

Thus the last alternative leaves open other avenues into the trade, and at the same time gives a preference to the more regular and formal system. It is claimed on behalf of the Company that since 1886 there has been a considerable increase in the proportion of plumbers who have entered the trade by Apprenticeship, and that a great improvement has taken place in the training given to them. Unhappily, the methods which it favours have not yet been universally accepted, nor anything like universally, throughout the trade.

What gives greater value to its work, moreover, are the means it has adopted to secure efficient administration of its system. For it has been successful in obtaining the co-operation of the London Master Plumbers' Association, and of the men's Union, the United Operative Plumbers' Association of Great Britain and Ireland, and the three bodies co-operate closely on this point. In 1900 they formed a Joint Board, named the Plumbers' Apprenticeship Board, to deal with Apprenticeship and allied subjects in London. Further, the Company also co-operates with the professions and authorities which are chiefly concerned with health and sanitation—the Municipal Authorities, the Medical Profession, the Sanitary Engineers and so on. It has thus secured that the training of plumbers shall be in close touch with all those who are interested directly in ensuring their efficiency and that it shall satisfy the requirements not only of the trade itself but of those wide interests which the trade has to serve.

The Plumbers, therefore, have afforded an admirable and successful illustration of how it is possible gradually to bring about the adoption of a definite system of training suited to the needs of their business, and at the same time

to allow, subject to careful regulation, a limited scope for alternative methods of entry. This is the policy which appears to be required in most of the trades of London, and the experience of the one we have been considering seems to show that such a policy is feasible in practice. Unfortunately, even with the plumbers, it has not yet been universally adopted, but it has at least made considerable progress. In one point, however, it appears to require extension. As stated in a previous chapter (Chapter VI) there is some difficulty in regulating the numbers of mates who learn the business, and this could be done better if it were made a rule that at a certain point such mates should be definitely recognized as learners, and that only those who could satisfy the necessary tests should be allowed to continue their rise to be mechanics. Such an addition, indeed, it would appear to be possible to graft without great difficulty on to the policy of Registration.

Boys' Homes, Clubs, Brigades, and Scouts have next to be considered. Of the former there are a considerable number, some being purely residential and for the use of those already in work. More important for the present purpose, however, are such as take orphans, "waifs and strays" or other neglected and deserted children, often keeping them for some time after they have begun work, or even themselves starting to teach them a trade, whilst they are still in the Home, and finding them positions when they leave it. Such trades are usually those required for the support of the Homes—e.g., tailoring, boot-making, baking and carpentering. Some have also a good deal of printing work to do, and in this case take in outside orders as well. They appear to be, on the whole, successful in getting their boys into good work, and sometimes even in supervising them afterwards; partly, no doubt, because they keep them up to about sixteen or even longer, that is to say, during the years when other boys are most apt to run wild. Similar work is also done by many of the Poor Law Residential Schools.

Boys' Clubs and Brigades, again, accomplish their best

work in keeping their members under supervision, control, and, in some cases, definite rules of discipline. The drill, physical training and organized exercise are of special value. They do comparatively little in the way of actual placing, and their tendency has been rather to abandon than to undertake this. Probably the policy is a wise one, since, though able to assist individuals, they are not, as a rule, so situated as to make this work both general and effective. At the same time their members are in a better position to recover work if they lose it, since the others are often able to find them vacancies in their own firms. Still the really valuable element in the provision of such Clubs is the supervision and control they exercise, especially if they provide some definite training or discipline.

The limited number of boys with whom they deal, however, and the restricted measure of their control over them, has reduced the scope and value of these various institutions. The new general system of Exchanges and Care Committees requires, therefore, some description, since it not only aims at covering the whole field, but at co-ordinating and rendering effective the work of those agencies which are already in existence. The organization, when complete, will consist of a network of Committees, attached to each Elementary School and working in each district in co-operation with the Juvenile Advisory Committee of the Labour Exchange.<sup>1</sup>

The establishment of the latter began in the autumn of 1910 with the three areas of Camberwell, Saint Pancras and Stepney, and the Care Committees first took practical shape in the reorganization scheme passed by the County Council late in 1908. By this, among other things, special officers were appointed to develop the system. Supervision in each case lasts until the age of seventeen is reached, but there is much to be said for continuing it up to eighteen in order to bring it into line with the period of control over young persons under the Factory Acts.

The Care Committees originally came into existence to carry out the duties of the Education Authority in refer-

<sup>1</sup> There is a Central Advisory Committee for the whole of London.

ence to the feeding and medical examination and treatment of school children. Each of the main branches of their work may be delegated to smaller sub-committees. The aim is to have one such Committee for every school, but at present some few take charge of two or more. They are appointed by the Managers, partly from their own number and partly from outside, and Committees in charge of a single School may contain from six to nine members. Head Masters and Head Mistresses are invited to take part in the proceedings. The work of After-Care may now be briefly described.

From four to eight weeks before a child leaves the prescribed School Leaving Form, which is issued by the Education Office of the Council, is filled in by the Head Master or Mistress and transmitted to the Secretary of the Committee. The part of it so filled in consists of a school report and among other things contains information as to a child's Standard in the School, general ability and conduct, special ability, if any (including progress at Manual Training or Domestic Economy), height, health, and the trade and type of Continuation School recommended. This is signed by the master or mistress. A more detailed verdict can often be obtained if these details are filled in by the person responsible in consultation with a member of the Committee. An interview between the latter and the individual boys can then be arranged with advantage to take place at the same time, and it is very desirable that where possible there should be one.

For the rest of the form the Committee is responsible. It covers the father's trade, home circumstances, and the wishes of the boy and his parents regarding his future. Where possible a visit to the home is strongly recommended. Finally, the form, with the Committee's suggestions thereon, is despatched to the Exchange not less than a fortnight before the boy leaves school. Usually it is also advisable to notify him or his parents of the time for calling at the Exchange and to impress upon them the need of doing so. This can best be done a few days before he leaves.

The Juvenile Department occupies usually a part of the building which contains the adult Exchange, but has separate rooms and where possible a separate entrance. Its general policy and administration are controlled by a Representative Juvenile Advisory Committee appointed for each Exchange District, such committees having a paid secretary and staff to carry out the detailed work. Ordinary applications are received in the morning, and a Rota Sub-Committee of the Juvenile Advisory Committee sits on two evenings a week to interview boys who are still at School, or who have not yet found work. Parents are generally seen at the same time. Members of Care Committees who are interested are also invited to be present. The Exchange receives and classifies School Leaving Forms, deals with applications and communicates with the parents of those who have not applied, requesting them to call. It also canvasses employers and endeavours to fill vacancies to the best advantage.

Supervision rests mainly with the Care Committee concerned, each boy being in charge of some responsible person who may or may not be a member of it. To it those who have failed to attend at the Exchange or who have withdrawn their application are referred for a visit and report. On the other hand, when a boy has been successfully placed, an "A Form" is sent, giving the character of the job, the wages, hours and prospects, and recommendations as to attendance at evening schools. The lad is then visited by the person responsible for him, and a report sent to the Exchange within one month, and afterwards twice annually in May and November. The fact of his falling out of work is also notified to it as soon as possible, and the attempt is made to induce him to re-apply. Thus together the Care Committees and the Exchanges exercise some measure of control and can check, to some extent, continual changes of job. They also encourage the joining of Evening Classes, Clubs and Thrift Societies. At present the great difficulty is to get the majority of boys either to utilize the Exchanges at all or to continue to re-register if they do not at once get

work; but this will be overcome as experience of their practical value increases. Once again it is the case that the creation of a habit is necessarily slow.

Other towns and a few County Authorities possess similar schemes. Some of them were created by the Education Authorities previous to the passing of the Labour Exchange Act, others after, and as a result of, it. Some again only carry out parts of the work, only placing boys, for instance, and not supervising them afterwards. A few undertake special branches of it, one town providing for the delivery of goods by a central service of messengers, instead of each shop employing its own. Two schemes—those of Edinburgh and Birmingham—may be shortly described.

The former was established under the Scotch Education Act of 1908, the Local Education Authority setting up a bureau of its own, whilst in 1910 a satisfactory compromise was come to between it and the Exchange Authority by which a division of functions was made, and effective co-operation secured.

“The two staffs were placed in adjacent rooms in the School Board Office and to the parents the fine dividing line between the functions of the two Officers is almost invisible. To them the Office is an arrangement at which all sorts of information as to likely careers for their sons and daughters can be got, and where, the career being decided upon, a position in some actual business or industry is found. It does for them what a wise schoolmaster would do in a small district of only two or three schools. That is why the office of the School Authority and not of the adult Labour Exchange is the appropriate place for housing the joint organization.”<sup>1</sup>

The duties of the Education Officer include those of “keeping the system of further education in real touch with the industrial needs of the locality,” giving advice

<sup>1</sup> Paper on “Juvenile Employment: The Edinburgh Method of Co-operation between the Education Authority and the Labour Exchange,” by J. W. Peck, M.A., F.R.S.E. (Clerk to the School Board of Edinburgh), read at the First National Conference on the Prevention of Destitution, May, 1911. The description of the Scheme is summarized from Mr. Peck's paper.

as to suitable employment, available vacancies and the value of particular openings, and finally supervising the young workers, more especially in reference to continuation classes. Among the functions of the Exchange are the collection and promulgation of general industrial information, the registration of applications, and the bringing of employers offering particular jobs into contact with suitable children. Both the Education and the Exchange Officers canvass employers, each for his particular purpose, and their premises are both connected by telephone with the adult Exchange. Control over the children continues up to the age of seventeen.

For their detailed supervision the establishment of Care Committees was being pressed forward at the time when Mr. Peck's paper was written. School Leaving Forms and circulars to parents to attend with their boys or girls are utilized much as in London. There are two registers—a Personal one of those who have actually attended, and a General Register of those who have not. The former receive preference for employment, and three or four applicants are usually sent for an employer to select from. The City is to be covered by a total of twelve Care Committees, dealing with groups of schools and not, as in London, with a single one only.

At Birmingham,<sup>1</sup> instead of two closely co-operating departments, a single one was established within which both Educational and Exchange Authorities receive adequate representation. At the inception of the scheme, the two existing Committees were combined into a single "Central Care Committee." The Employment Bureau in connexion therewith forms part of the national system of Exchanges, but the Local Education Authority, by means of its representation on the Committee, is given a fair share in the

<sup>1</sup> The description given below is summarized from the Report of the Special Sub-Committee of the City of Birmingham Education Committee on the Institution of a Juvenile Employment Bureau and Care Committee in Birmingham. The scheme with detailed alterations is that drawn up by this Committee.

control and direction of its policy, and the manager of the Bureau is appointed by the Board of Trade after consultation with it. It can also request his dismissal. Management of the After-Care side of the work is retained by the Education Authority, subject to the condition of providing the Bureau with full information as to its work. The Children's Bureau and the Adult Exchange occupy separate buildings, but for the convenience of employers have the same telephone number. Teachers are encouraged to continue their present work of placing boys and girls, but are to notify the Exchange of the vacancies they fill.

To assist the central organization, Local Exchanges are provided in six districts, for the reason that—

“ It is advisable that children should have Local Exchanges within walking distance at which they can make applications ”;

and the following policy is to be adopted :—

“ Ordinary situations, requiring no special skill or brains and offering no particular prospects of advancement, may be filled locally. This arrangement is a matter of mere commonsense. It would be foolish to send a boy from Saltley to apply for a vacancy in a small factory in Greet, for which there would also be local applicants. On the other hand, the endeavour should be made that the most promising lads should have the best situations throughout the city open to them.”

The Branch Committees are under separate officers who attend on every evening, except Sunday, between 6 and 9.30, and there are separate hours for boys and girls to apply. The Branches also receive notices of applications and vacancies from the Central Bureau.

Supervision of young persons starts, where possible, with an interview three months before they leave school and continues up to the age of seventeen. It is in the hands of Care Committees, and the establishment of a separate one for each school is contemplated. Their duties are much the same as in London or Edinburgh. Each helper, it is proposed, should take charge of from eight to ten families who need constant, and of a few more who only need occa-

sional, supervision, and it has been estimated that about one-quarter of those under seventeen will require the former. The Branch Exchanges will act as bureaux of information for the Committees within their area.

Other systems in existence do not require separate description, but it may be noted that in London Juvenile Advisory Committees are part of the Exchange Organization and controlled by the Board of Trade. Each Local Committee, however, contains ten members nominated by the Education Committee of the County Council, and two more by the Head Teachers' Association. The question as to whether the Exchange or the Education Authority shall be the controlling body has led to much heated controversy. Happily in London, as in Edinburgh and Birmingham, a satisfactory working compromise has been arranged, and the matter is likely to be settled elsewhere in a similar way, according to the variations of local conditions. At present about half the schemes in existence are worked directly under the Central Labour Exchange authority, whilst control of the rest is in the hands of the Local Education Authority under the Choice of Employment Act (1910). A joint arrangement as to working has been come to between the Boards of Trade and Education, and whichever is the nominal head, the division of duties between the Exchange and Care Committees is on the lines that have been described.

In all cases the same three elements are present, namely, the Juvenile Exchange, the district Advisory Committee, and the Care Committee controlling individual schools and supervising individual boys. The part they will play in the future organization of Boy Labour must be left to the next chapter. Their present objects are briefly as follows. First, there is the purely business one of suiting boys with jobs and employers with boys, and not merely of bringing them together, but of bringing the right boys into touch with the right employers. Their success must depend largely on their power to convince both parties as to their value, and at present one of the chief difficulties of the London Committees is caused by the refusal of so many of those

concerned to recognize it. Educationally, the problem is the double one of placing and supervision, and, to be complete, the organization requires to have brought within its scope workers and jobs of all kinds. Its functions, therefore, include the placing of as many of the former and the filling of as many of the latter as possible, good and bad alike. Further, provision for actual definite training is required in some cases, and for discipline and regularity, far more than for training, in others.

Placing, therefore, includes the proper organization and dovetailing of jobs, as, for instance, in the use of Blind Alleys to fill the interval before permanent employment can be obtained, whilst the work of approaching employers to secure their support and various detailed improvements in conditions of employment will for some time occupy a large share in the time and energy of the Exchanges.

Supervision takes several forms, and is required before, during, between, and out of employment. The first covers the provision of the requisite advice and information precedent to a boy's start in life. The second involves careful control after he is at work, to see that he receives a fair chance in the workshop, and makes the best of it and of himself, together with such information and assistance as are necessary to his progress. Here the co-operation of Trade and Continuation Schools will be needed. "Between employment" includes not only the prevention of intervals of unemployment, but help in making a change of job, where such is necessary. Lastly, supervision "out of" employment will embrace that of home conditions and will utilize and extend social activities, such as Clubs and Societies and the means of physical and intellectual development. And on the gradual growth of such an organization rests much of the hope of future progress.

Finally, the work of the Trade Unions may be divided into three main sections, the regulation of the conditions under which apprentices and learners are taken and taught, the detailed care and control of them during the process, and the work of the Societies in connexion with the provision

or improvement of Technical Instruction. Of these the first refers to the regulations under which employers are to be allowed to engage their boys, whilst the second covers such things as the fixing of rates of wages and efforts to secure proper teaching. The former is concerned mainly with three questions : the proportion of apprentices or boys to journeymen, the period of service and the age at which it starts, and the position of the Out-of-Time apprentice or learner.

As regards the first of these, the Trade Unions fall into three groups : those insisting upon a fixed proportion, those which adopt varying proportions according to local circumstances, but enforce these rigidly, and those which either cannot or do not enforce any proportion at all. In London, at any rate, the Printing Trades are most energetic in securing a definite scale. With them the most common limit is that of one apprentice to three journeymen, and there is a proviso in some cases that only men constantly employed shall be taken count of. The London Society of Compositors further prohibits altogether the employment of apprentices in Newspaper Offices, and the engagement of improvers anywhere is strictly forbidden. This proportion, which is a decidedly liberal one, is enforced in London by the London Society of Compositors,<sup>1</sup> the United Machine Managers' Society, and the Consolidated Society of Journeymen Bookbinders. The Federated Electrotypers and Stereotypers allow one to two. There is, however, some recruiting of the trade by provincial workmen who, in the case

<sup>1</sup> In the case of the Compositors the proportion is accepted by a large number of firms, but has not been embodied in a definite agreement. Thus it is stated that "There is no agreement and no rule as regards the proportion, but the London Society of Compositors endeavours to approximate to one apprentice to three journeymen. A great many houses have, however, apprentices in excess of this proportion." On the other hand, the position in many offices is expressed by the following statement by a well-known firm : "The Trade Unions, by arrangement with the Masters, regulate the number of boys to the journeymen, the average being about one boy to three journeymen." This proportion, therefore, would appear to prevail over a considerable part of the trade.

of the compositors at any rate, are admitted to the Union on proof of membership of any recognized Society ; but in recent years a proper period of Apprenticeship seems to have been more insisted upon. The rules of the Amalgamated Lithographers fix the scale at one to five with a maximum of six in any establishment, and a new apprentice can be taken in the last six months of the service of the senior apprentice.

Other Unions which lay down and enforce a proportion include the London and Provincial Society of Coppersmiths and Metal Workers (one to three), the Silver and Electro-Plate Operatives Society (London Branch) (one to four), and the United Pattern Makers, at least in some districts, (one to five). The Amalgamated Brushmakers have a complicated rule by which the number of apprentices varies from one to three, and two to five up to nine to 100 journeymen, and a member setting up for himself is allowed to have one apprentice without employing a journeyman. In addition, a good many Societies fail to get their rates established in London, but succeed in doing so elsewhere.

The chief examples of the adoption of different proportions according to local circumstances by agreements between masters and men are afforded by the Engineering Trades and more particularly the Amalgamated Society of Engineers. This Union has found the enforcement of a uniform rate impossible, owing to differences in the conditions prevailing in various districts and sections of the industry, and has been able to work successfully the arrangement of having separate regulations for each of them. They have even adapted them to the particular circumstances of individual firms, and to the number of boys their business requires. Similarly, the Friendly Society of Ironfounders leaves the matter to be regulated by the by-laws of its branches according to local needs, these by-laws being subject to the sanction of the Central Council. It is doubtful, however, if they are so successful in enforcing them as is the Amalgamated Society of Engineers.

Finally, there are a large number of Unions in which no

such limitation is enforced in London, though in some it may be elsewhere. So far as the Building Trades are concerned, the small number of boys and apprentices taken renders the rule unnecessary. If it exists, it is practically inoperative, since the maximum fixed by the Unions is practically never reached. Thus the Bricklayers and Stonemasons neither have nor need a rule to this effect, and the Plasterers have one, but questions as to its observance seldom or never arise. On the other hand, the Carpenters and Joiners have sometimes felt the need, especially to prevent the flooding of their business with boys during periods of good trade. They also used to complain of the influence of the Trade Schools in causing too many to try to enter it, but less has been heard of this recently. As a rule the complaint is that employers will not take more than a few learners.

Outside the Building Trades, there are numerous cases where no rule is enforced. Thus one of the Smiths' Societies states that they are recruited almost entirely from hammermen, not from boys, and that the question does not therefore arise, and some of the numerous societies in the Precious Metal, Instrument and Electrical Industries describe their attempts at regulation as unsuccessful. Probably the method of a variation in the proportion according to circumstance will be the most successful, since it can be adapted most completely to the varying needs of different places. So far as it is practicable, therefore, its adoption is to be recommended.

The questions of the period of service and of the age for starting to learn a trade have already been fully dealt with, and here it is only necessary to refer shortly to the attitude of the Unions towards them. Once again the distinction has to be made between those which do and those which do not, or cannot, enforce regulations. Thus in the Printing Trades, seven years' Apprenticeship is, as a rule, strictly adhered to. The Amalgamated Lithographers, however, will accept five or six in practice and permit a Verbal Agreement in place of an indenture, provided the consent of the local

Branch of the Society is obtained. For starting, an age limit of seventeen is fixed by the Stereotypers, and of fifteen by the Amalgamated Lithographers, whilst the Compositors endeavour to prevent boys being bound after about the age of sixteen. The Machine Minders, on the other hand, have no limit. The Compositors have a period of a few months' trial before binding, and the Lithographers have a rule that a boy must be withdrawn, if he is not bound within six months after being taken on. As already stated, the Apprenticeship rule is modified to some extent by the acceptance of members of Provincial Societies by whom the full Apprenticeship has not been enforced, but in recent years greater strictness appears to have been shown in this respect.

In the metal trades, five years' Apprenticeship or Service is more usual, and sometimes a definite start must be made before the age of sixteen. The Amalgamated Society of Engineers, however, allows an alternative of three years' work, with a previous period of four years in the Engineering Department of a Technical Institute. With one Society of Smiths a hammerman must get full money within four years after being advanced to smith's work. It fixes no definite age limit for starting, but gives certain slight advantages, as regards admission to membership, to those who have started before a certain age. In House Building, with one possible exception where the period is five years and the starting age fifteen, no rules on either point are enforced in London, and the same appears to be the case with some of the Art Metal and Instrument Trades.

There is also a certain amount of regulation in the case of apprentices and other learners who have completed their service. Thus the Amalgamated Society of Engineers lays it down that an apprentice must get the full rate two years after the close of his time, or, if he is to receive a lower rate, the District Committee must consent to it. The Boilermakers and Iron Shipbuilders allow one year to get journeyman's money after the close of the recognized period. In the Printing Trades, again, apprentices must receive

full money immediately on coming out of their time, and improvers are not recognized. On the other hand no regulation appears to be attempted in a good many trades.

Turning to the conditions under which the teaching is given, wages are left almost invariably to be arranged by the employer and the boy. Hours and overtime are fixed by the Working Rules of a district, those of the boys being the same as those of the men. Sometimes, however, there is some attempt to secure proper teaching and due observance of any contract to provide it. The most definite step has been taken by the London Society of Compositors, which has recently set up in many offices Committees of the "Chapel"<sup>1</sup> to supervise the instruction of the apprentices and look after their interests generally. Other Societies in the Printing Trades, the Amalgamated Society of Engineers, the Boilermakers' Society, and some more take active steps to bring this about. Usually they deal with individual employers, and try to put a stop to undue specialization and other undesirable features. The work done and its success vary with the strength of the different Unions, and a great many are not in a position to accomplish much.

Thirdly, their attitude towards Technical and Continued Education may be described as one of general support and encouragement. Active opposition is very seldom found nowadays, and less is now heard of the fears formerly expressed that the activity of the Schools might cause a trade to get overstocked with boys. One does, indeed, meet occasionally with such statements as the following :—

"We feel bound to discourage attendance at the Technical Schools. Lads of all sorts go to them and naturally turn to

<sup>1</sup> "In connection with their Trade Union the Compositors in each printing establishment are organized as a 'chapel,' and one of the members, chosen among themselves as 'father of the chapel,' becomes the medium between the Union, the individual men, and the employers" (Booth, *Life and Labour of the People*, vol. vi., p. 192). One of the duties of the Father of the Chapel is to make a monthly return of the number of apprentices and turnovers, and the system under which they work (Rules of the London Society of Compositors, xxiii. 3).

the Woodworking Trades, which get overstocked. We object to manual training before they leave school for the same reason.”

Or again :—

“ The officials of the Technical Institutes try to overrun the trade with boys from their Day Trade Classes.”

This attitude, however, is seldom taken up nowadays, but some Trade Union secretaries, who otherwise are perfectly favourable to them, are apprehensive lest they should be “ used to turn out blacklegs, which is the great danger ” ; that is to say, men who will go to them and pick up a smattering of the business and then undercut Union rates by working for a low wage. This fear, also, is becoming less common. Other objections are that the teaching is of little value, or that “ their teachers are not practical men,” but these are less frequent than among employers or foremen. On the other hand, complaints are sometimes made that sufficient facilities are not provided.

Among the Union Officials as a body, therefore, complaints and objections are comparatively rare. Usually efforts are made to bring the Schools to the notice of the boys, to point out their advantages and to induce them to attend. Actual compulsion is not practicable, the more so as in many cases apprentices and learners are not eligible for membership until near the close of their time, and, until they are, the Unions have no control over them. Thus, so far as the boys are concerned, they have been restricted to persuasion and encouragement. One or two indeed have tried the policy of offering prizes to their junior members for proficiency at their school studies, but this has not proved a success and has been abandoned. Perhaps the most practical step has been that taken by the Amalgamated Society of Engineers which allows a three-year period of Apprenticeship or Service, in place of one of five, in the case of those who have previously spent at least four in the Engineering Department of a Technical Institute. I believe, also, that a few Unions, such as the London Compositors and the Amalgamated Engineers, also approach

employers with a view to the grant of time-off for attendance at classes.

To sum up, the position of the Societies in London is not, as a rule, sufficiently strong to enable them to carry out an active policy either to secure increased attendance by the boys or better facilities for it from the masters. Some of them, indeed, lament that in neither case is there such a desire to make use of them as there ought to be. Thus it has been said to me :—

“ We find the boys will not spend, nor sacrifice, money on going, and the employer won't let them off to do so, though it might be to his advantage,”

and for this reason some of the more active Trade Unionists advocate compulsory Technical Instruction.

The position is much the same with the other branches of their activity, though some few Societies, particularly in Printing and Engineering, are able to do a great deal. But the interest taken by the Unions in various matters, and not least in Trade Teaching in the Schools, should render possible increased co-operation between them and the employers<sup>1</sup> in the adoption of improvements by voluntary means and the establishment of better rules and regulations for these various matters. Probably the two sides will be more and more brought together for these purposes through the medium of Advisory Committees of the Labour Exchanges, and indeed a start has already been made in this direction.

## II. CURRENT PROPOSALS.<sup>2</sup>

Schemes and suggestions for dealing with the problems of Industrial Training are both numerous and varied ; but there are a few which for one reason or another are of sufficiently outstanding importance for separate consideration. These include the proposals made by the Majority and

<sup>1</sup> The system of co-operation in plumbing, as organized by the Plumbers' Company, has been described earlier in this chapter.

<sup>2</sup> Unless otherwise stated, these various proposals will be considered only so far as they refer to and affect boys.

Minority of the Poor Law Commission of 1905-9, those of their special Investigator Mr. Cyril Jackson, on which the former at any rate are largely based, the recommendations made by the Consultative Committee of the Board of Education in 1909 in their Report on Attendance at Continuation Schools, the scheme recently put forward by Mr. Seebohn Rowntree and Mr. Bruno Lasker, and especially the suggested establishment of Schools for unemployed juveniles, and the changes advocated by a recent Committee dealing with the labour of Van and Warehouse Boys. Of these a short description and criticism may not be out of place.

The Majority Report <sup>1</sup> adopts almost *en bloc* Mr. Jackson's suggestions :—

- (i) that all boys shall be kept at School till the age of fifteen ;
- (ii) that exemption below this age shall be granted only to those leaving to learn a skilled trade ;
- and (iii) that there shall be school supervision till sixteen and replacement in school of those who are not properly employed.

They also recommend, though without submitting any definite plans, that improved facilities for technical education shall be offered to young people after they leave School, that, to prevent deterioration of physique, physical drill shall be more prolonged and thorough than hitherto, and that the Board of Education shall reconsider the whole curriculum, aims and ideals of the system of elementary education, especially with a view to the provision of a better preparation for a life of manual labour.

“ We doubt,” they say, “ if the atmosphere of our School life is altogether congenial to a career of manual labour ” ;

whilst on the second point they remark :—

“ Although we are not unanimous on this point, some of us believe that the most effective and thorough method of infusing

<sup>1</sup> The proposals dealing with Boy Labour are given in Part IX (25) (a) of the Report. Cd. 4499 of 1909, p. 630.

into boys approaching adolescence a sense of discipline and self-restraint, both physical and moral, and of improving their physique for subsequent occupations, would be a universal system of military service."

This matter is developed more fully by Mr. Jackson, and deserves full and careful consideration. Some day it may get it, but of this one cannot be sanguine.

Mr. Jackson<sup>1</sup> himself goes much further. He recommends special Labour Exchanges for boys leaving school, the abolition of half-time employment of children of School Age, the "better grading of wages" to check the flow of lads into unprogressive occupations through the temptation of high, initial earnings, and a system of compulsory Continuation Schools. He also mentions favourably a suggested amendment of the Shop Hours Acts with a view to preventing excessive hours of labour on certain days of the week.

To many of these proposals it is easy to give a cordial agreement, though probably the time is not yet ripe for the adoption of some of them. Thus fuller grading of wages is eminently desirable, but is probably not practicable with our existing machinery or until the Labour Exchange Organization is fully developed. The establishment of a minimum below which no boy shall be employed is as much as is yet practicable. It will be discussed in the next chapter. Again, supervision should not end at sixteen as suggested in the Majority Report, but should continue till eighteen, the age to which the control of young persons under the Factory Acts is extended. So, too, replacement in school would be likely to lead to confusion if the ordinary Elementary Schools were utilized for the purpose. This matter, indeed, can best be dealt with by improved measures for the placing of lads in the classes and grades of work to which they are fitted, for these would decrease very largely the number who were not suitably occupied. Those who were left could then be provided for by means of special

<sup>1</sup> *Report by Mr. Cyril Jackson on Boy Labour to the Poor Law Commission (Appendix XX. Cd. 4632 of 1909), especially pp. 29-32.*

Schools for Unemployed Juveniles on the lines suggested by Mr. Rowntree.

Dealing primarily with attendance at Continuation Schools, the Consultative Committee<sup>1</sup> produced what was quite a comprehensive scheme for extending Industrial Education. Its chief features were :—

- (1) Better and closer connexion between Elementary and Continuation Schools, and various improvements in the former to fit their pupils more completely for work at the latter, including the abolition of whole and half-time exemptions from attendance for children under thirteen, and, after a few years, for those under fourteen in the case of industrial employments.
- (2) Exemption from full-time attendance under the age of sixteen, only where children are, and for so long as they continue to be, suitably employed. Special classes to be formed for those retained at School or recalled to it after an interval of employment.
- (3) Juvenile Employment Registries to give advice in the selection of employment up till the age of seventeen.
- (4) Improvements in existing Continuation Schools, as conducted on the present voluntary basis.
- (5) Owing to the fact that, without compulsion, the system is not likely to be complete, the Local Education Authorities to be compelled to provide suitable Continuation Schools for young persons under seventeen within their area and to keep a record of their names and employments.
- (6) Local Education Authorities to be empowered with the consent of the Board of Education to frame bye-laws for making attendance at them compulsory for all young persons under seventeen resident and working within their districts who are not otherwise receiving a suitable education.

<sup>1</sup> *Report of the Consultative Committee of the Board of Education on Attendance at Continuation Schools.*

- (7) Employers to let off such young persons to attend these Schools at the hours and periods required by the Local Education Authority, these latter to be fixed after consultation with their representatives and those of the workpeople.
- (8) The Local Authority to fix a limit of hours which may not be exceeded in any day or week by employment and further education combined.
- (9) The curriculum to give effective training for the duties of citizenship and to have reference to the crafts and industries of the district, giving prominence to the manual and practical side, but not disregarding the claims of general education. The instruction should on every ground include systematic physical training.
- (10) Consideration whether Continuation School grants might not be paid on a higher scale in the case of those authorities adopting compulsory attendance.

There are also various other proposals of a more or less detailed character.<sup>1</sup>

The scheme, in its main outlines, is admirable and statesmanlike. The lines of advance which it advocates—improved elementary education, development of the industrial and manual, as well as of the literary, capacities of the boys, Juvenile Labour Exchanges, Compulsory Continuation Schools, reduced hours for juvenile labour—have all a part to play in the solution of the problem. The suggestion of special classes largely gets over the difficulty of the Majority Report proposal for replacement in School, but if Schools for Unemployed Juveniles are also to be established, the two will almost certainly have to be combined. Eighteen again would be a better age than seventeen as the limit to the control exercised by Education Authorities and Labour Exchanges, for the reason already given. There is also

<sup>1</sup> E.g. that the occupations of males and females should be shown in the Census for each year up to the age of twenty-one. They are actually so given from fifteen to twenty, but not between twenty and twenty-one in the Census of 1911.

much to be said for making compulsory attendance at Continuation Schools legally obligatory, rather than permissive and dependent on its adoption by the Local Authority, at least in the case of London and of larger boroughs and urban districts. Nevertheless the policy of the Committee would mean a very long step in this direction.

Mr. Rowntree<sup>1</sup> outlined a system of After-Care, under the control of Juvenile Advisory Committees acting in co-operation with the Head Teachers, to continue until nineteen, and an organization of Care Committees to check bad home influences during the years of school life, each member to deal with only three or four families. He likewise adopted a modified form of the half-time proposals of the Minority of the Poor Law Commission, suggesting that up to the age of nineteen all adolescents should spend a considerable proportion—perhaps one-third—of each week in Training Schools.

His most important contribution to the solution of the problem, however, is the scheme of Schools for Unemployed Juveniles. It may be described in his own words :—

“ The system would work out in this way. Before a lad left an elementary school, he would be obliged to produce a certificate signed by a prospective employer, stating that he would forthwith be engaged in regular work at a weekly wage, or else to enter immediately a training school where he would remain until he found work. In this school, which might be in connexion with an existing Technical School, he would receive such instruction as would develop his general intelligence and render him adaptable to any employment that might be forthcoming. He would, for instance, add to his knowledge of applied mathematics and drawing. . . . He would be taught to express himself in writing and would receive carefully regulated instruction in physical drill. An important place in the curriculum would be given to industrial training. . . . The lad would remain in the School till he could produce an employer's certificate to the effect that he had obtained regular work. The exact definition of . . . regular work would require considera-

<sup>1</sup> *Unemployment: A Social Study*. By B. Seeböhm Rowntree and Bruno Lasker. Chap. I. “ Youth under Nineteen Years of Age,” pp. 1-28, and especially pp. 20-24.

tion, but we suggest that, at any rate, no promise of work for less than a week should be considered."

Further, up to the age of nineteen, a boy should always return to the School during any period of Unemployment, the employer being compelled under penalty to notify at once the fact of his dismissal. One free meal a day should be given to the lads, first to maintain physical efficiency, and secondly as "compensation for the catch jobs they miss," whilst thirdly it would enable each school to cover a wider area by making it unnecessary for the lads to return home to dinner.

The difficulties due to the continual coming and going of lads of widely different attainments could only be met by careful grading of classes, which would have necessarily to be very small. Variations in numbers according to the state of trade would be provided for by making the staff and buildings adequate to the larger demand, whilst in busy times, "the lads unemployed would probably be the least efficient and, therefore, those standing most in need of the increased personal attention which could be given by an ample teaching staff." As regards opportunity of searching for work, Mr. Rowntree expresses the hope that this will shortly be rendered unnecessary thanks to Labour Exchange development, and school hours could be regulated so as to give as much time as might still be necessary. He suggests from nine to twelve and from two to five, with a holiday on Saturdays, and special leave of absence as occasion arose.

The scheme shows remarkable promise of better things and justifies the hope of its authors that under it "periods of unemployment, so far from being demoralizing, would be educational"; but probably the discipline and control of the boys that it would secure would be a more valuable result than the actual education they received. It would give the best possible opportunity for carrying out the policy of "replacement in school of boys not properly employed," suggested by the Majority Report and by Mr. Jackson. As regards those on the point of leaving, however,

it will probably be better to keep them at the Elementary Schools till a job is found for them, rather than transfer them to others for the short intervening intervals. Mr. Arthur Greenwood, indeed, has proposed a similar scheme under which attendance shall be voluntary, but Mr. Rown-tree objects, and in my view quite rightly, that it would fail to reach those boys who most need systematic training. To some extent, however, it will undoubtedly be necessary to bring into operation gradually whatever policy is adopted. Possibly it might be combined with some system of Juvenile Unemployment Insurance, in which benefits would be made to depend on attendance.

A report of somewhat narrower scope has recently been published by a Departmental Committee of the Home Office (composed of Messrs. Gerald Bellhouse, Cyril Jackson and Nigel Walker), dealing with the Hours and Conditions of Employment of Van Boys and Warehouse Boys.<sup>1</sup> It proposes that no one under eighteen shall be employed as a van boy for more than seventy hours per week inclusive of meal times, every one of them having not less than  $1\frac{1}{2}$  hours per day for meals or absence from work. Where, however, employment is for not more than eight hours per day, only one hour need be allowed. Moreover, such boys shall have the public holidays usual in their districts or days in lieu thereof. Employers shall keep cards or other records showing the hours and mealtimes of each boy. Local Authorities are to be given power to regulate their employment still further by bye-law, and no one under sixteen shall be employed in this capacity between 9.30 p.m. and 6 a.m. Boys in warehouses which receive goods from vans for sorting and distribution shall also be under these regulations, their employment in storage warehouses shall be regulated under the Factory Acts or by other means, and that of young persons in wholesale warehouses, where goods are displayed for sale, shall be brought under the same restrictions as are applied by the Shop Acts to persons employed in retail shops.

<sup>1</sup> Cd. 6887 of 1913.

These proposals which have received a good deal of futile and unfair criticism from certain quarters appear to be practical, well considered and as far-reaching as the terms of reference would allow. Their adoption could hardly fail to do much to convert many of the jobs under consideration into excellent openings for boys of a certain class, and so to minimize the dangerous and even injurious results to which hitherto they have so frequently led. Probably it will be necessary in the near future to reduce hours of employment considerably below the maximum of sixty-one (exclusive of mealtimes), that is proposed by the Report. There is also much to be said, at any rate in the case of van boys, for insisting upon compulsory engagement through an Exchange and a fixed period of employment, such as will be suggested in the next chapter.

The drastic scheme of the members who signed the Minority Report of the Poor Law Commission has been left to the last owing to the highly controversial character of many of its proposals. Its chief items may be briefly described in the words of their summary of recommendations.<sup>1</sup>

"That in order to secure proper industrial training for the youth of the nation, an amendment of the Factory Acts is urgently required to provide that no child shall be employed at all below the age of fifteen; that no young person shall be employed for more than thirty hours per week, and that all young persons so employed shall be required to attend for thirty hours per week at suitable Trade Schools maintained by the Local Education Authorities."

"That we recommend these reforms for their own sake, but it is an additional advantage that they (and especially the halving of boy labour) would permit the immediate addition to the number of men in employment equal to a large proportion of those who are now unemployed or under-employed."

Elsewhere in the report the advantages of the scheme are more fully sketched. The employment of boys would be less profitable, and this, together with a probable scarcity

<sup>1</sup> *Minority Report of the Royal Commission on the Poor Laws and Relief of Distress*, Cd. 4499 of 1909. Part II, Chap. V. "The Halving of Boy and Girl Labour," pp. 1190-2.

of boy labour, would lead to the substitution for them of adult men. A decrease in their earnings would get rid of the difficulty caused by boys having "even too much pocket money" and thus becoming independent of home and too easily led into evil courses, and their leisure would be absorbed under discipline. Systematic physical training under medical supervision would rectify to a great extent "the adverse hygienic conditions of town life." Finally a good general industrial and manual training could be given, including "even a groundwork of training in particular handicrafts such that few even of indentured apprentices obtain," and the boys, each according to his capacity, could be made into adaptable and intelligent workmen, each "ready to undertake any kind of unspecialized work and competent, even if he does unskilled labour, to do it 'with his head.'"

The scheme as outlined is a bold and comprehensive one and is attractive because of its very simplicity. But it would also lead to very considerable difficulties. Indeed, setting aside those elements in it (e.g. raising the school age to fifteen) upon which nearly all the other schemes outlined in this chapter are agreed, and considering only suggestions like the system of industrial half-time that are peculiar to the Minority Report, there seems no doubt that legitimate objections are very great, and in my view the advantages that certainly attach to it can be obtained equally well along other lines to which these objections do not apply.

In the first place it has to be remembered that the workshop plays, and must continue to play, the main part in teaching boys the more skilled processes and in providing that regular and disciplined performance of every-day labour that forms the major part of the training of the lower grades. It is true that this part has to be supplemented to an increasing extent by the Trade School or Technical Institute in the one case, and by the Continuation School in the other. Still, it is the workshop that does the lion's share of the teaching, for the reason that a boy has to be

trained for it and to do the work as it will be done there. Further, it can give what is required, and expert opinion is largely agreed that where this is the case, the training that is given by it is the best of all. So too with the lower grades, regularity, discipline and adaptability are excellent things to acquire at a School, but they are better still when acquired in the workshop, for the workshop and by the workshop. The primary requisite, therefore, is to take the latter and its training and make the very best of them by regulation and control of its conditions and methods—in short, by the Organization of Boy Labour. In this, indeed, the Schools have an important part to play, and to enable them to play it, we need both a measure of compulsory attendance and a further shortening of the hours of juvenile labour.

The alternatives, in short, are to use and make the best of the existing means of training in the workshop, or to try to substitute for them to a large extent the Trade or Continuation School. For this is what it is likely to come to. Now the School is not fitted to take the chief or even an equal part in the training. There are a number of trades which it cannot as yet teach at all, and there are others whose earlier stages cannot, for one reason or another, be carried out by it. Again, work in the School is not done under the conditions of the workshop, and therefore is seldom or never in a position to replace it completely. It can supplement it, however, or, where these conditions are likely to prove injurious to young boys, they can be kept altogether at such institutions as Day Trade Schools up to the age of sixteen. It is far better, in fact, that the learner should spend the bulk of his time at the bench, but with a certain number of hours at a Trade School for purposes both of training and of physical development. The same is true also of the lower grades of labour. What is best for them is regular and disciplined employment in the workshop itself, and this also can be provided by better organization together with a fuller provision for continued education.

Moreover, the proposal to substitute the School for the Shop to the extent of half-time does to a great extent involve a confession that the latter is not adequate for the purpose, that its teaching is a failure, and therefore that some new system must be found to replace it. And if it is made, the change is likely for a number of reasons to lead to the supersession, wholly or in part, of the one by the other. The lack of confidence shown in them will discourage employers. The feeling will grow that the Schools have undertaken the job and that it can be left to them, and this may very well result in a deterioration, rather than an improvement, in workshop methods. Indeed, in some cases it might cause employers to cease to take boys, trusting to obtain them ready-made, as has already been found to occur with the Day Trade Schools in one or two of the women's trades. The foremen, again, are less likely to take an interest in their training, when they are only partially under their control, just as is said to happen with the migratory improver, when "a foreman will never take the same interest in a boy another man has trained, as he does in his own." So, too, the work of a learner will be difficult to organize, if he is continually leaving it, whether at dinner time or on alternate days or for alternate weeks. It is far from easy to arrange it so far ahead, and he will have to be given such as will fit the time he spends in the shop so that his progress while he is there may be retarded rather than accelerated.

Another point concerns the question of discipline and supervision. These admittedly are often defective at present, but will they be any less so under a system of Dual Control? The foreman will never feel he has full command when the boy is continually going off elsewhere after half the day is over, and the instructor at the School may be no better off. There is also the danger that in some cases continual movement backwards and forwards will accentuate restlessness and indiscipline, and so counteract in part the good effect of the physical and technical training. Moreover, a clash of views and interests between the two

is almost inevitable. Already, under the voluntary system, the objection is raised that the teaching of the Trade Schools is making boys less receptive of that of the foremen or the men in the workshop and that they are too ready to set up against them the smattering of knowledge which they have acquired elsewhere ; and this tendency can hardly fail to be increased enormously under the half-time system.

Further, there is the general position of the employers to be considered. The change undoubtedly would lead to an enormous amount of trouble and inconvenience for them, and more particularly for firms of small or moderate size. With large firms who could conveniently employ two shifts of learners or boys this might not be very great ; with others it probably would. Moreover, the wages of two boys employed half-time under the new conditions would undoubtedly be greater than that of one full-timer under existing ones. Hence to justify such a fundamental alteration in the position of Boy Labour, it is necessary to show either that employers as a body are clearly abusing their position, or that the advantages which it professes to secure are obtainable by no other means. Neither view appears to me to be justified. The first certainly is not ; and, as to the second, a system of compulsory continuation schools, with a reduction of the hours of juvenile labour, would produce all or nearly all the advantages of a half-time system, and at the same time avoid its difficulties.

A further consideration is that the complete solution of the problem requires a thorough organization and regulation of Boy Labour, and that in the provision of this the co-operation of employers will be absolutely essential. At present their attitude is certainly not unsympathetic either towards their boys or towards suggestions for improving their conditions. But to attempt to put into force a system of this kind, which appears likely to cause them much trouble and difficulty and to which as a body they are opposed, would be fatal to combined action. And since this is essential, the proposals adopted must be such as will secure it, and any others are impossible.

There are two further points, both connected with the tendency of a half-time system to increase the numbers engaged in Total or Partial Blind Alleys. The Minority Report expects a large substitution of other methods for the employment of boys to result from its proposals, and where men can easily take their place or where improvements in machinery enable them to be dispensed with, the amount of boy labouring will be reduced ; but it is doubtful if the extent of such substitution will be considerable. Where it does not occur or where boys are essential, many more than before will have to be employed, probably at an increased rate of wage per hour. Now there is a good deal of work which is simply boys' work and not men's, and in this, even allowing for all improvements, the change will require larger numbers, and so will increase, or at least retard the decrease of, Blind Alley Employment.

Secondly, whilst the total cost to the employers who continue to employ boys may be greater, yet the wages of individuals are likely to be diminished. The Minority Report suggests that this will not be the case to the extent of one-half, and that they are likely to fall about one-third. This, therefore, will make it more difficult to ensure for learners what the average working-class parent regards as a reasonable payment, especially as in many cases employers will find it easier to reduce their wages than those of boy labourers. The result will be a tendency to increase the number of promising lads who prefer labouring to learning, particularly in the case of able children in poor circumstances. At present they can often combine a reasonable wage with a chance to learn ; but a reduction of one-half in time and of one-third in wages, as suggested by the Minority Report, will render this far more difficult, and may cause some who are capable of better things to go to low-skilled work.

Finally, there is the question of providing the necessary schools and teachers. The scheme will involve an enormous increase and development in every direction. Even in the case of the proposal for compulsory attendance for a

few hours only in each week, there will be no little difficulty in securing the requisite extensions. It would appear, therefore, to be nearly impossible to bring the new scheme into force in the immediate future, and at the same time secure adequate accommodation and a reasonable level of capacity in the staff. This will be more particularly the case with actual trade teaching; for probably enough experienced teachers could only be obtained by withdrawing from industrial life an unduly large number of competent foremen. Nevertheless similar objections apply, if not to quite the same extent, to all classes of instruction, and a supply of teachers for them could only be slowly created. From this side, in fact, a complete scheme such as the Minority suggest must be approached by gradual stages and could scarcely be introduced all at once.

The chief objections to the proposed system of Half-Time may now be briefly summarized. First, trade or industrial training can best be given in the workshop, and the Trade School is not fitted to play so large a part as the system would allot to it. Secondly, the adoption of this change would involve an admission of the failure of the former and would discourage employers and perhaps lead them to leave matters entirely to the School. Thirdly, it would be difficult to secure from foremen the same interest as before in boys who were only employed part-time, and to obtain adequate control over the latter either in the shop or in the school. Fourthly, it would cause great trouble and inconvenience to employers and so make it harder to secure their co-operation in schemes for the general re-organization of Boy Labour. Fifthly, the reduction in boys' wages might increase the number who, though capable of better things, would enter Blind Alley jobs, rather than accept low wages as learners. Lastly, there would be the difficulty in the near future of providing sufficient Schools or an adequate number of competent teachers.

These various reasons, therefore, appear to turn the scale against the adoption of this policy—at any rate, in the immediate future. The better course appears to be to carry

out a strict organization of Boy Labour, accompanied by improved industrial education. The former will include the proper placing of lads in, and their control at, work and the better regulation of their industrial conditions generally. It will undertake a careful grading of them according to capacity and the finding of suitable situations, and especially will give the able children of poor parents the best possible chance to rise by putting within their reach jobs which will yield both a decent wage and a chance to learn. Above all, it will seek to ensure regularity and discipline in the workshop itself. Finally on the educational side there will be compulsory Continuation Schools and a reduction in hours of labour sufficient to render possible effective attendance. The whole policy will be described in detail in the next and concluding chapter.

## CHAPTER XVIII.

### THE NEEDS OF THE FUTURE AND THEIR SATISFACTION.

#### I. THE PROBLEMS.

#### II. THE NEEDS OF THE SITUATION.

(a) THE ORGANIZATION OF BOY LABOUR.

(b) INDUSTRIAL EDUCATION AND GENERAL EDUCATION IN RELATION THERETO.

#### III. SCHEME IN OUTLINE AND SUMMARY.

#### IV. CONCLUSION.

#### I. *The Problems.*

Two Problems—The Organization of Juvenile Labour: Its Meaning—Training or Education—Its Extent—Existing Conditions—The Mixture of Methods—Difficulty of Establishing a Standard of Teaching—Wage-earning and Less Regular Methods—Influence of Lack of Knowledge and Information—Influence of Blind-Alley Employment—The Problem of the Skilled Trades—Special Difficulties—Influence of London Itself—Educational Considerations.

#### II. *The Needs of the Situation.*—(a) *The Organization of Boy Labour.* Separate Questions to be Considered—(i) The Mixture of Methods—Possibility of Organization without Establishing Uniformity—What Uniformity means—Variations within a Trade—How to Establish Uniformity—The Work of Juvenile Labour Exchanges and Care Committees—Juvenile Trade Boards—Organization to apply to Low-skilled Labour also.

(ii) General Care and Control—Importance of Character and Position of Boys—Supervision to start before they leave the Elementary School—Supervision at Work essential—Provision for Improved Organization of Juvenile Exchanges and Care Committees.

(iii) Adapting of Boys to Jobs—Partly accomplished already—Extent to which it is possible—Classification of Jobs and Boys—Fixed Dates for Leaving School.

(iv) The Organization of Blind-Alley Employments—How Improvement is to be secured—Alternative Methods of dealing with Blind Alleys—Treatment of Partial Blind Alleys—The Break in Industrial Life—The Co-operation of Employers—Bad General Conditions—Importance of Boys' own Behaviour—Development of Existing Organization—Fixed Periods of

Engagement—Objections to this—Alternative Policies—Compulsory Engagement through an Exchange—Possibility of Special Rules in Certain Trades.

(v) The Organization of Other Forms of Employment—Flexibility—Definiteness—Extension of Short Service—Provision for Capable Boy Labourers—Overstocking—Organized Migration.

(vi) The Prevention of Intervals between Jobs—Causes of Juvenile Unemployment—Importance of More Regular Habits—Other Suggestions.

(vii) The General Regulation of Conditions—Collective Bargaining on behalf of Boys—Following up of Cases of Exploitation—Promotion of Improvements—Help to be derived from Continuation Schools' Reports—A Juvenile Minimum Wage: How far possible.

(viii) Summary of Preceding Sections—Encouragement of Good Habits essential—Co-operation of all Classes required—Existing System of Organization must be generally developed—Proposals for Further Developments.

(b) *Industrial Education and General Education in Relation thereto.*

Education in the Workshop already Considered—Improved Industrial Quality in all Grades of Labour must be secured—Knowledge of Some One Job—Adaptability—Changes in Elementary Education—The Industrial Bias—Full Development of Abler Boys—Testing of Capacity—Wide Extension of Existing System of Central Schools, resulting in Division of Elementary Education into Two Parts—Provisions to Secure Full Use of Existing System of Education—Abolition of Half-Time and of Juvenile Street-Trading—Restriction of it in London—Limitation of Employment of Children out of School Hours—Labour Certificates to be granted only in Exceptional Cases—Raising of School Age to 15—Increase of Hours of Attendance between 14 and 15—Continued Education—Extension of Day Trade Schools—Evils of existing Voluntary System of Attendance at Evening Schools—Recent Progress—Character of the Continued Education that is Required—Need for Compulsory Attendance up to the age of 18—Schools for Unemployed Juveniles—Reduction in Hours of Juvenile Labour—Prohibition of Spasmodic Overtime—Need for Variation in the System adopted.

## II. *Scheme in Outline.*—(a) *The Organization of Boy Labour.*

(1) The Development of Existing Organization—(2) Uniformity of Method—(3) Juvenile Trade Boards—(4) Detailed Improvement of Particular Methods—(5) Special Arrangements for Dealing with Following-up—(6) The Dating Back of Indentures—(7) Dovetailing of Employments—(8) Co-operation with Employers—(9) Industrial After-Care—(10) Extension and Reorganization of Care-Committees—(11) Improvement in School-Leaving Reports—(12) Provisions for Laying Down

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and Enforcing the Observance of Standard Requirements—(13) Extension to 18 of the Period of Control over Juveniles—(14) Provision for Periodical Continuation School Reports—(15) Trade Schools for Unemployed Juveniles—(16) Medical Inspection—(17) Application of Special Rules to Industrially Dangerous Occupations—(18) Experiments in Enforcing Fixed Periods of Engagements and in Compulsory Engagement through a Labour Exchange—(19) A Minimum Wage for Juveniles—(20) Limitation and Regulation of the Employment of School Children.

(b) *Industrial Education and General Education in Relation thereto.*

(21) Reorganization of Elementary Education—(22) Central Schools—(23) Raising of the School-Leaving Age—(24) Extension of Day Trade Schools—(25) Compulsory Continuation Schools—(26) Reduction in Hours of Labour—(27) Restriction of Overtime and Nightwork.

#### IV. *Conclusion.*

### I. THE PROBLEMS.

THIS final chapter appears to divide itself naturally into the following parts. First, it will be of assistance to give a very short summary of the state of affairs prevailing in London, and already described in previous chapters. Secondly, I shall state, in some detail, the problems of Industrial Training, and the kind of measures that are best fitted to deal with them, and thirdly I shall try to give the outlines of a scheme to meet, as I hope comprehensively, the whole of these requirements.

To begin with, Industrial Training involves the treatment not of one problem only but of two, which to a great extent overlap one another. The first is that of the Organization of Juvenile Labour generally. In other words, we need to create for it good habits of work and regular conditions, not merely in relation to health, sanitation, wages and so on, but in relation also to the character of its employment. Good industrial conditions mean order, regularity and discipline, and the growth, therefore, of good industrial habits, and these are at least as important as definite training and for many in the lower grades of labour form the main part of it.

The second problem is that of Training or Education

proper, which is often and quite naturally regarded as *the* problem of Industrial Training. It is a wider one than is sometimes supposed, for it must not be confined to what is actually learnt in the workshop, but must include the question of developing and adapting elementary education to the needs of the future worker, and after its close the provision of further instruction in Continuation Schools. Nor must it be limited to skilled workpeople. It must also cater for the needs both of the semi-skilled and of the unskilled, so far as they need definite training as opposed to regularity and discipline. There is, moreover, a third problem of Boy Labour, that namely of general factory and industrial conditions, but this will only be dealt with here so far as it has a direct bearing on the main question.

Turning to the existing state of affairs, the first point to be insisted upon is what I have described as the *Mixture of Methods*. There are various paths leading to the acquirement of a trade to-day, and so far as each trade or industry has a method of its own, this may rightly be regarded as only the natural corollary of the greater variety of modern conditions. Thus, to take only the more important, there are four forms of Regular Service—Formal Apprenticeship, Verbal Apprenticeship, Employment during Good Behaviour, and Working and Learning—there is Learning by Migration and there is Following-up. Now in many trades, no one of these methods markedly predominates, but several exist side by side and compete with one another. Sometimes, indeed, two or even more of them may be in use at the same time in a single firm.

Now the effects of the resulting confusion are decidedly serious, and produce or intensify many of the other defects in Industrial Training. For they make it difficult to establish any proper Standard in the teaching of boys in the workshop, and, except in a few cases, no such standard exists. What is required is that there should be some definite idea which the public opinion of a trade will accept, as to the kind and character of the teaching and the method of imparting it. An employer undertakes certain obliga-

tions, when he employs a boy, and it is necessary for it to be clearly recognized what these obligations are ; and this is what is meant by a fixed Standard of Teaching. Where, however, there are a number of competing methods, obligations differ from one firm to another. Some have undertaken to teach the trade, and others only to give opportunity to learn it. Others again employ and pay a boy solely as a wage-earner and he teaches himself as best he can.

Now apart from the special dangers involved in the latter case, this *Mixture of Methods* makes the establishment of any definite Standard impossible, since what is good, or at least adequate, treatment in one case, is the very reverse of good in another. Hence the less regular methods tend to lower the standard for the more regular, whilst the existence of several side by side renders it difficult to enforce any standard at all and causes abuses and exploitation to be harder to detect or prevent. Public opinion in the Printing Trades and, to a lesser extent, in Ship-Repairing enforces certain obligations, because a single method is almost universal in the one and decidedly predominant in the other. But of many industries this cannot be said.

Side by side with this, there is a great growth in the direction of less regular methods of training. The boy, even in skilled work, is coming more and more to be regarded as a wage-earner, and *to regard himself as such*, and is employed and paid up to his full value as a worker. He, therefore, has to teach himself and to take his chance of learning. This practice is not without advantages. It gives, for instance, better opportunities to the abler children of poor parents than they could otherwise obtain, and boys with their wits about them can successfully learn in this way who would not otherwise get so good an opening. But for the majority these advantages are outweighed by the danger which they run of spoiling their chances, either by sacrificing "learning to earning" or by continually moving from job to job and failing to stick to anything.

Both these problems arise largely out of the fact that the necessary industrial organization is either non-existent or hopelessly inadequate. Both of them, again, are symptoms of a defect that is common to the whole field of Boy Labour. To begin with, boys and their parents suffer from a considerable and often complete lack of information as to their needs, their capacities and their opportunities. Frequently their choice of a trade is left to the last minute, that is till they are actually leaving School, and if this is not, the finding of a job is. Till recently, again, they were often left completely without help or guidance, and had to find work for themselves, knowing neither what to look for, nor where to look. Many, therefore, have no idea either of the possibilities or of the dangers of different jobs, and just take the first that offers. Having found it, they are under no control or supervision, and stay in it or leave it as chance dictates, often moving continually from one to another. Thus, even if they have ever realized them, they soon lose sight of their true needs and interests and so spoil their opportunities. This, also, further encourages the growth of less regular methods, and the treatment of boys as wage-earners rather than learners.

Such, therefore, are the chief causes which create the problems of Boy Labour. These causes are further accentuated by the character of certain occupations—Blind Alleys or pure boys' jobs which last only during boyhood and compel those who work at them to make a change as they approach manhood, and Partial Blind Alleys which provide permanently for some of those who follow them, but not for all. The difficulty, moreover, consists less in the fact that the change has to be made, than that when the time comes no provision has been made for it and the youths affected have not been fitted or prepared for any other work. Quite the most serious trouble of all, however, results from the type of character which the nature of these Blind Alleys and the existing lack of organization and control combine to create in the boys themselves. They tend to make them restless and cause many to lose all

steadiness and application, and to grow up irregular, casual and undisciplined instead of, as they should be, regular, steady and disciplined, even if unskilled. And in many cases they also cause more to spend time at the jobs concerned than are actually required to do the work.

Again, in the Skilled Trades, lack of organization and control is once more responsible for their particular form of the problem, namely that of Wasteful Recruiting. Some, after starting to learn, drop out altogether. Others grow up partially taught, and only able to secure employment casually, or for part of the year, or on inferior work at a low rate of pay. Thus a Reserve of Boy Labour is required to allow for the failures so produced, and far more need to try to enter a trade than could find permanent places in it if all succeeded.

Finally there are various special difficulties. It is growing less and less easy to master the whole of a trade in a single firm. Machinery is increasingly taking over certain parts of the work which a boy requires to know and to learn even if as a man he will never have to perform them. Specialization in output frequently makes it impossible for one firm to teach more than a part of the work. Again, certain things can often be learnt best in a small shop and others in a large one, so that sometimes the business can be most effectively acquired by utilizing both. Then again there is the provincial influx which is partly a cause and partly a consequence of London conditions. To some extent it is inevitable since London will always attract able and ambitious men from elsewhere. But outside London more regular conditions of teaching often prevail and a general training is easier to obtain, whilst the supply that is available from outside encourages London employers to use it to escape from the difficulties and expense involved in training their own workmen.

The whole question is further complicated and accentuated by the peculiar characteristics of London. Its huge size makes all organization difficult, and the scattered character of its chief industries assists the growth of a variety

of methods. For the same reason such good jobs as exist are more difficult to find, and the absence of big localized industries means that there is no large natural outlet to absorb the boys of a neighbourhood. These influences, therefore, encourage, if they do not create, irregular methods in general and irregular habits in particular, whilst high rents and heavy rates still further increase the expense of teaching boys and deter employers from doing so.

Lastly, there are some more purely educational considerations. Certain facts, such as the prevalence of street trading and of employment out of school hours, prevent the fullest use being made in all cases of what is already provided. Probably also children leave school at an age when, even if they have obtained a fair measure of literary education, they are not capable of coping successfully with the dangers of juvenile employment. Thirdly, the existing system is not adapted as well as it might be to fit them for their future callings. For without attempting to teach particular trades, much more could be done to prepare them generally for commercial and industrial life, more especially if the period of schooling were so extended as to allow a fuller development of elementary education.

Further provision for continued education is likewise required. In country districts the problem is mainly to establish for this purpose schools of a suitable character and within reasonable reach of the great bulk of the children. In large towns and urban districts this need has to a great extent been provided for, and the difficulty, especially in London, is rather to get them to attend, or to keep up attendance. A great proportion of the children never enter such a school, and of those who do many fail to remain there for more than, or even as much as, a single session. Numerous causes, most of which are particularly potent in London, combine to produce this result. Defective elementary education prevents some from taking full advantage of the teaching provided, counter attractions are powerful, and long hours, frequent overtime and the long distances to be travelled prohibit attendance or make it unduly arduous.

## II. THE NEEDS OF THE SITUATION.

Having summarized the prevailing conditions, I propose next to deal with the problems which those conditions create, and in so doing I shall adopt a method similar to that utilized by Messrs Rowntree & Lasker in dealing with unemployment in York.<sup>1</sup> Each phase of the question will be treated in turn and the measures which are required briefly indicated. Then in conclusion I shall sketch out a general set of proposals, summarizing and arranging those that have previously been referred to.

(a) **The Organization of Boy Labour.**—In doing this, I shall deal first with Organization, including under this term those parts of the problem of providing training in the workshop which really depend upon it. As so extended, it is possible to distinguish some seven separate questions :—the Mixture of Methods, General Care and Control, the Adapting of Boys to Jobs, the Organization of Blind Alley Employments, the Organization of Other Forms of Employment, the Prevention of Intervals between Jobs, and the General Regulation of Conditions. All these will prove to be mainly matters for organization, and in order to achieve permanently beneficial results a large and widely developed system will be needed. This the existing Labour Exchanges and Care Committees do not yet provide, but in the likelihood that they will do so in the future, lies the chief hope of grappling successfully with the problem.

(i). *Mixture of Methods.*—The evils of the present Mixture of Methods need not be recapitulated. The object to be attained is the establishment in each trade or industry of a definite standard of obligation as regards teaching and as regards the conditions under which it is given, whatever be the actual method adopted. To some extent the enforcement of such standards is possible without uniformity in methods of training. By a careful organization of the placing of boys and a strict supervision and control of their employment, it might be possible to guard against the

<sup>1</sup> *Unemployment : A Social Study.*

dangers of abuse in individual cases and gradually to raise the standard on both sides. Indeed, where trouble arises mainly from lack of organization or from restlessness and ignorance on the boy's part, nearly all that is required can be done in this way, and since such Mixture of Methods can only be gradually removed, it will have to be dealt with in the interim upon these lines. At the same time, complete and successful treatment of the problem requires the establishment of uniformity. The superiority of this is illustrated by its success in Printing, and to a lesser degree in the Engineering Trades, and the control and supervision of individual boys will lead naturally towards it.

What uniformity involves, however, should be clearly recognized, and especially the fact that to apply a single unvarying system to all trades and districts alike will prove impossible. What is required rather is that in each trade the one best suited to its needs should be chosen and its observance made as nearly universal as possible. In many cases the method in most common use will best serve the purpose. As a rule, the chosen system will provide a minimum below which it will not be possible to go, but the use of stricter conditions might be permitted under careful safeguards. What is intended, therefore, is that each trade should eventually obtain a single method of teaching suited to its needs. The Printing Trades would, for instance, continue formal Apprenticeship; in Engineering the Verbal Agreement might be enforced throughout, whilst Employment during Good Behaviour seems most likely to be adopted in the Art Metal and Building Trades. Again, Short Service and Migration might come in time to be generally adopted in many cases, and to displace the more normal arrangements.

Sometimes, however, allowance would have to be made for variations in the character of the work within a trade; and thus uniformity might not be possible throughout the whole of it, and separate methods would prevail in its different branches. Thus in the Furniture Trades, a higher level of skill is needed in the retail work of West and

North-West London than in the wholesale business. Distinct systems, therefore, will probably be required for them, but each within its own sphere will need to be as uniform as possible.

Uniformity, in short, means such uniformity within each trade or part of a trade, and will not be limited to the mere establishment of a particular method of teaching, but will include the enforcement of the conditions under which it is to be carried out. Some agreement as to the length of service, hours, wages, and attendance at Technical Schools will probably be necessary, except so far as they are dealt with independently.<sup>1</sup> Further, in the course of carrying out the change, opportunities will inevitably occur of removing existing defects in training and of getting rid of those causes which now prevent the adoption of better methods; and of these full advantage must be taken. For instance, employers at present are opposed to Formal Apprenticeship owing to the difficulty of breaking an indenture. But if uniformity is adopted, it could be accompanied by provisions to make some public authority, such as the Labour Exchange, a party to the contract with power to break the indenture on proof of the failure of either party to observe it.

To carry this policy into effect, however, requires the full adaptation and development of the work of the Labour Exchanges in connexion with Juvenile Labour. These at present are still in their infancy, and have yet to win the full confidence of employers, of parents and of boys, and hitherto only a comparatively small proportion of either has made a systematic use of them. So far, therefore, the problem is mainly administrative, to develop the machinery of the Exchanges and of the School Care Committees, working in co-operation with them, and to utilize it to secure the uniformity of method that is desired, though their powers also need to be extended in certain directions. They do something already to attain this object, but to accomplish it effectively their complete organization is necessary.

The mere development of the work will tend in the direc-

<sup>1</sup> As, for instance, by Legislation.

tion of uniformity. By organizing the placing of boys and getting into touch with employers a system of Juvenile Exchanges can do much to bring it about gradually. The present lack of it is due largely to the multitude of engagements which are made independently by individual firms and workpeople. The mere increase, therefore, in the number of them which are entered into through a central authority would reduce this variety very considerably. Further, through its control over individual boys, and by co-operation with School Care Committees, the Exchange can bring pressure to bear upon unsatisfactory cases, and so raise the standard of the worst up to the level of the best. Experiments are already being made in the way of getting into touch with the employers, and these are likely to be extended.

Moreover, the Juvenile Advisory Committees contain representatives of the teachers and of the workpeople and of employers in various industries, and so will come to form in time a sort of informal Trade Board that will eventually be able to agree upon general rules to regulate the employment of boy labour within their respective trades. It is, however, essential that their policy should be directed towards obtaining uniformity, wherever this is possible.<sup>1</sup> In London, indeed, much of this work will have to be carried out through the Central Advisory Committee and not through those of the separate Exchanges. Otherwise differences in the agreements made might defeat the main object.

It is worth while also to consider the possibility of establishing Juvenile Trade Boards, of a similar character to those which exist in certain sweated industries, in order to secure and enforce a standard of teaching, wages, and general conditions, and bring the worse employers up to the level of the better. The proposal is one of those which are ripe for consideration and discussion rather than for adoption. Its success would require a complete organization of the

<sup>1</sup> One excellent illustration of the way in which this could be done can be found in the measures adopted by the Plumbers' Company which were described in Chapter XVII.

Exchanges, and their present imperfect development is of itself sufficient to prohibit its immediate adoption. On the other hand, if the system just outlined did get into full working order, it might very probably be found to satisfy all requirements without the intervention of a Trade Board, and might also prove the more flexible instrument of the two. There would possibly remain certain trades, however, where the Exchange Organization alone could not be completely effective, and here the Trade Board System might be adopted. For the present, indeed, what is required is to develop fully the existing organization, and in reference to this two points must be kept clearly in view. In the first place, modifications and exceptions will, for a time at least, have to be allowed. Secondly, the matter will not end with the establishment of uniformity, and when this has been secured, it will need to be utilized for the gradual raising and improvement of the general standard.

Nor will this be confined to skilled labour. For the lower grades will require a similar standard, though their problem is somewhat different. In semi-skilled work there is not the same variety of method to be grappled with, because such teaching as is needed is so much simpler and less complicated. The difficulty rather is that there are no definite methods of teaching at all, and boys just chance to learn or pick up their jobs anyhow. Nevertheless these semi-skilled positions equally require to be taught and learnt properly, and therefore definite and uniform conditions are essential. This also applies to unskilled work. The chief requisite, in fact, in all these occupations is the growth of good habits of steadiness, industry and regularity, and the problem is less that of teaching in the narrower sense than in the wider one of organization and control. Here, too, it is a development of the work of the Exchanges and Care Committees that is most needed.

(ii) *General Care and Control*.—It is not merely for the purpose of ensuring uniformity in methods of teaching and conditions of employment that a general organization of juvenile labour is essential. However good we may make

the former, they cannot fulfil their purpose if defects in the latter spoil the chances of many boys before they find a trade or job. Indeed, unless we can secure a uniform quality in the boys themselves, it is doubtful if we can ever establish uniformity in other respects. For the bad or unsatisfactory character is an important cause of defective or unsystematic training. Under existing circumstances many boys are ruined industrially before they have had time to find their occupation, others are spoilt by making a wrong choice and going to the wrong thing, and others again are injured because the conditions under which they are employed make successful teaching, or at least the full and proper use of it, impossible.

Moreover, certain peculiarities of modern conditions, especially in London, affect and complicate the whole problem. There is the lack of uniformity already described. Again, boys are coming to be treated primarily as wage-earners and only secondarily as learners, and the increasing difficulty of teaching a trade completely in a single shop has resulted in increasing migration from one firm to another ; and all these causes combine to encourage restless habits. Thus on the one hand the control exercised over a boy within the workshop is growing less and less, and on the other the need for it is ever greater and greater.

Further provision, therefore, is required for the care, control and supervision of the boys themselves. Much of the present trouble is caused by the free rein that is allowed to the restlessness of boy nature, by carelessness and want of thought, sometimes deliberate, but more often unconscious, on the part of parents and children, and by the general lack of information and guidance from which they suffer. Boys, therefore, require not merely supervision in the narrower sense, but to have all the necessary facts and information placed within their reach. This is essentially the work of the Education Authorities, and the School Care Committees, in co-operation with the teachers, are their instruments.

Supervision must begin before they leave the Elementary

School, to make them and their parents realize the conditions and prospects of their future life. For hitherto many have been allowed to leave without having previously taken any account of their future. All of them, therefore, should be approached seriously several months or even a year before the time comes and made to realize their needs, and to think over, and, where possible, to make up their minds as to, their future, so that some sort of arrangement may be made for them. Something indeed is done already in this respect, but it is doubtful if members of Care Committees can find time in addition to their other duties to do thoroughly this, the most essential one of all.

Further, when the time for leaving comes, fuller and more detailed School reports are needed for the guidance of those concerned. The difficulty here is that they would necessitate a great deal of work by the head teachers for which no payment is made, and so long as this is the case, a really thorough filling-up of the forms cannot fairly be expected.

Again, many children in London live at long distances from the Schools they attend, and careful arrangements are required for their transference to the care of a member of some Committee which is working in their immediate neighbourhood. This could be done by requiring that it should take place at some fixed time—probably as soon as his School Leaving Form is sent to the Exchange.

Finally, supervision at work by members of the Committees remains essential for the purpose both of assisting boys to find places and of inducing them to stick to them when they are found, and to make such moves as may be necessary at the right time and in the right way. In London the work is now done through periodical reports sent to the Labour Exchanges after visits to the homes; and this branch of it is perhaps most efficiently carried out, though more might perhaps be done to keep in touch with their progress by means of visits to the employers. Experiments are indeed being made of sending cards periodically to the latter asking them for reports upon their boys, but the system of periodical visits to them which has been adopted with success in

other districts might well be tried here, since it serves to keep them interested and to smooth over small difficulties.

A more complete organization of the Care Committee as of the Exchange System is, therefore, required; and various other improvements can be suggested. At present, except for a small, though efficient, organizing staff, the work is entirely in the hands of voluntary helpers, whose numbers are in many cases insufficient. To accomplish what is needed, therefore, an increase in the paid staff is essential; and I would suggest the taking over by it of the business of approaching and dealing with boys and their parents up to the time when they leave School, whilst the voluntary worker would take the matter in hand as soon as the School Leaving Form had been filled in and be henceforth responsible for it. This would necessarily involve an increase in the paid staff sufficient to cope with these additional duties, and payment should also be made to the Head Teachers for what they have to do. With such improvements it would then be possible to empower some central authority, in London the Education Committee of the County Council, to lay down and enforce a certain minimum of conditions to be observed by Committees and Headmasters in the work of After-Care, and so to raise the less efficient to a proper level and gradually improve the whole system.

(iii) *The Adapting of Boys to Jobs.*—The grading of the boys and of the work, both at the Schools and the Exchanges, is already carried out to some extent. Jobs are classified by the Exchanges partly according to the skill or brains which they require, and partly to the prospects of permanent employment which they provide. Nevertheless this classification could with advantage be made more detailed than it is, by distinguishing, for instance, those places which are temporary in themselves but likely to provide a permanency in the same firm, and those which will fit in well with vacancies occurring elsewhere at a later age. What is important, is that a clear idea of the different situations available should

be obtained, and that they should be graded according to the qualifications they require.

Similarly with the boys, what is needed is less a strictly technical classification than that the information as to each one should signify what his capacities are and in what direction they will lead him. Definite aptitudes for one job only are less common than is sometimes supposed. But certain broad distinctions can be made. First there is that between clerical and manual labour, since most boys are definitely suited either to one or the other. There is also a smaller number who are best fitted for work with the pencil. Secondly, a very clear line can be drawn between those who are fitted for skilled, semi-skilled and unskilled work respectively. There will necessarily be some border-line cases, and their calling will probably be determined by the number of available vacancies. Thirdly, but less frequently, boys show definite aptitudes for some trade or group of trades.

What is required, therefore, is, first, that the jobs available should be clearly and carefully classified, and that each boy's talents and capacities should be fully and sufficiently known beforehand, so that he can be placed at once in the position that is best suited to them. Secondly, the different grades of work have to be treated with an eye to the future as well as to the present, so that each may not merely be rendered innocuous but may lead definitely to something and be put to some definite use. Certain jobs, for instance, will enable children of poor parents but with good abilities to earn large wages at first and work their way up to good positions later on, whilst others which give a chance to learn should be filled by those boys who are likely to take it.

These objects again depend largely for their achievement on the development of the system of Exchanges and After Care, and on the proposals already described for improving them. Thus the discovery of a boy's aptitudes and wishes whilst he is still at school and the more careful filling-in and return of the School Leaving Form will provide much of what is needed. A great difficulty at present is that there are no

fixed times for leaving the Elementary School, but each boy is free to do so immediately he reaches his fourteenth birthday, and usually does so at the end of the same week. Hence boys have to be placed in work at once in whatever place is going, and each situation must be filled with the best available at the moment. Now apart from any interference with the work of the school, this makes it inevitable that often the best use is not made either of the boys or of the jobs. Very frequently the right boy or the right job is not forthcoming when required, and positions have to be filled at once, since with a continuous stream of boys coming and going, employers are naturally unwilling to wait.

If, however, the times of leaving were restricted to a few fixed dates, there would then be considerable numbers to choose from, and each would have a far better chance of being fitted to his right job. Moreover, employers, being compelled to fill their vacancies at certain definite times, would be likely to organize their work accordingly: and this would reduce the present tendency to insist upon having places filled at a moment's notice. In return they would get a far better and wider selection among the boys.

The chief difficulty of adopting such a policy would be that of dealing with so large a number at once, but with more careful enquiry at school and more complete information available about them, this would be largely overcome. The change, however, might prove impracticable till this organization had been provided. Probably the actual arrangement adopted, at least at first, would be for boys to leave at the half term or at the end of the term immediately following their fourteenth<sup>1</sup> birthdays, and those reaching this age during the holidays at the close of the preceding term. There would thus be six fixed dates for leaving school in the course of the year.

(iv) *The Organization of Blind Alley Employments.*—These proposals have so far been directed mainly to preparing the boys themselves for their start in life or to making

<sup>1</sup> Or fifteen, if the age were to be raised.

it possible for those who have to deal with them to do so to the best advantage. It is also necessary that the authorities concerned should deal carefully and systematically with the work to which they are to be sent. With one or two exceptions, no job is good or bad in itself, but all may have good or bad effects according to the conditions under which boys are set to work at them. It is not the fact that certain positions are or are not filled that causes trouble, but the manner in which they are filled; and thus the same thing may become the blindest of Blind Alleys or be so utilized as to give an excellent start in life. Jobs, therefore, need to be organized, and the organization suited to temporary and low-skilled work generally, and more particularly to the Blind Alleys, may first be considered. Here also it must be borne in mind that the evil consists less in the job itself, than in the habits and character which it creates and in its failure to fit a lad for any further work after it comes to an end.

Such occupations can be dealt with in several ways. In some cases total elimination is both possible and advantageous. At one time the General Post Office had to dismiss a very large proportion of its telegraph messengers between the ages of sixteen and eighteen. It is now able to give to nearly all of those who wish to stay in its service the opportunity of permanent employment in one or other of its branches, and in the immediate future it will be able to absorb every one of them. As early as 1912-13 dismissals for "lack of prospects" were only some four hundred as against about four thousand under the old conditions.<sup>1</sup> Such re-organization would be less possible in a competitive industry, but it could be very frequently carried out in many individual firms. Indeed, even now some, of them avoid the employment of errand boys in non-permanent positions by setting the younger learners or apprentices to do their work, or economize their use of boy labour in various ways.

<sup>1</sup> For a description of the changes carried out, see Appendix, "The Telegraph Messenger and the Van Boy."

Secondly, Blind Alleys can by proper organization be made into connecting passages leading to more permanent employment. Boys can be put into them to await better openings, or, where the trade they have in view only takes learners at a more mature age, until such an opening occurs, whilst those with no definite objective can be placed in them for the time being, till they can make up their minds as to what they want.

The same result may be achieved in another way. Many jobs, notably those of general shop boys about factories and workshops, may or may not prove to be Blind Alleys. Many employers offer a "chance to learn" to a smart lad, and such an one can nearly always obtain promotion; and a well-organized Exchange can do much to ensure that as many of these places as possible shall be so utilized. By making itself acquainted with the conditions prevailing in different firms, it can get to know which of them offer such a chance and which do not; and knowing also the capacities of the different lads, it can send to the former those who will take it, and in so doing will encourage employers to promote more boys in this way. Such positions, indeed, are particularly well suited to those who possess ability, but who are in poor circumstances, since they have to earn good wages from the very first. Moreover, some firms prefer not to take learners straight off, but to start them for a few months on the errands and then to promote them if they are satisfactory. These arrangements might well be encouraged and made more numerous.

Similar steps can be taken for dealing with the Partial Blind Alleys. In some cases those who are displaced from them can be provided for elsewhere within the same factory in regular low-skilled work. Here again it will be the business of the Exchanges to acquaint themselves with the prevailing conditions, and make such arrangements as are possible. This may involve the selection of two classes of boys to enter these Partial Blind Alleys—those suitable for eventual promotion to the skilled work and others who will be transferred later on to something else. Such a distinction,

indeed, will be necessary, whether the latter can stay on in the same firm or not. The former will have to be limited as nearly as possible to the number of probable vacancies for mechanics.

Finally, it is one of the distinguishing features of boy labouring that there comes a definite break in industrial life when the boy's work ends and a change has to be made to something else, whereas, once he is fairly started, a learner's work in his trade is usually continuous. Often, indeed, the chasm between boys' and men's work can be bridged in the ways just described, but there will still remain many cases in which it cannot. What is required, therefore, is that a boy's labour shall not be considered by itself but in reference to his calling in manhood. Where, in short, his employment is not permanent, efforts ought to be made to prepare him for something else later on, and this should so far as possible be work of a kind for which his earlier jobs have fitted him. In the carrying out of this task Continuation Schools will have to play an important part, and much can also be done by proper choice of employment in the first instance. Moreover, as boys' jobs fail, men's jobs become available to which they can be transferred, and the filling of these could be carried out in a much better way than it is at present, whilst the work of supervision and control during adolescence will help to produce steadier workmen. For the evil of Boy Labour consists far less in the fact that it comes to an end at eighteen than that boys reach this age with nothing which they can do and nothing else awaiting them. Much of the work of the Exchange, therefore, will be to obtain adequate knowledge of conditions in the first place and then to use it to secure the desired results.

If, however, it is to achieve much success, the co-operation and sympathy of employers of labour is essential and can be secured in various ways, besides the present one of representation on Juvenile Advisory Committees. At the same time more complete arrangements are also needed for the purpose of obtaining and utilizing their support. So

far the Exchange officer has dealt with the matter simply as part of the general work of canvassing employers. What is wanted is a special staff, or a sufficient augmentation of the existing one, to enable them to be approached systematically and induced to assist the policy of the Exchange. At present there is no lack of sympathy on their part with the general objects of improving the conditions of juvenile labour; but some such action is required for it to be so utilized as to produce real improvement. It would, for instance, be possible in this way to provide for the promotion within a firm of as many as possible of the boys employed in a Partial Blind Alley and for the rest to serve a definite period as labourers until their transference elsewhere should be advisable.

A somewhat different question is that of the attitude to be adopted where general conditions are bad. It has been plausibly, but in my opinion mistakenly, argued that Exchanges should refuse to supply boys in such cases. It is true that, if all engagements had to be made through the Exchanges, or even if they were used by the great majority of boys, there would be much to be said for this view. As it is, however, the result of adopting such an attitude would be merely that the employer, having still plenty of boys to pick from, would simply get them from another source. Hence the proper policy for the Exchange is to fill such vacancies with as nearly as possible the class of boys they deserve to have. Inferior firms should have inferior boys, or, if somewhat better ones have to be sent, they should be removed as soon as a better position can be found for them. The Exchange cannot altogether prevent such firms from getting lads; but it can make it difficult for them to get good ones and provide only those of a poorer class, thus reducing the harm to a minimum.

Lastly, the behaviour of the boys themselves will have an important bearing on the success of any such arrangements. It is useless to organize their employment unless they themselves will work steadily and carefully at it. Restlessness or misconduct on their part and the ease and

carelessness with which they sometimes throw up work can defeat the best organization, and can only be overcome by proper control and supervision reinforced in some cases by engagement for a fixed period. In short, a definite attempt must be made to classify and organize boys' jobs and those to which they will turn in early manhood, so as to make the best and fullest use of all, and of this the care and oversight of the individual boy will form an integral part.

Here again success will depend primarily on the development of the existing organization, but there are certain matters, some of them already indicated, in which increased powers could be provided—the adoption of fixed dates for leaving school, an increase in the Labour Exchange Staff and in the paid Organizing Staff of the Care Committees, and the further subdivision of supervision between the latter and the voluntary workers. It might be also advisable to enact that no boy should be employed in certain jobs over the age of sixteen, since after this the difficulty of finding fresh work steadily increases.<sup>1</sup>

In this connexion, two matters need fuller discussion—the establishment of a definite period of engagement, probably of six months or a year, for all temporary jobs, and the compulsory engagement through an Exchange of all boys under a certain age. The former policy has great merits. It would check, perhaps seriously, the continual change from firm to firm, and so help to induce habits of steady work. The boys would become accustomed to taking jobs for at least a certain definite time, and this would gradually become permanent. It is objected, indeed, that they would refuse to bind themselves: but whilst this might be true to some extent of the older lads, those who are just leaving school are usually eager to start work and might probably think a formal engagement of this kind rather a fine thing. The employers, too, are likely to wel-

<sup>1</sup> To some extent the Insurance Act is having the good effect of causing boys so situated to be got rid of at sixteen instead of later. See Appendix VI.

come an arrangement that will give them the services of their boys for a fixed period, and prevent them from continually coming and going with little or no notice. There might perhaps be some difficulty in enforcing penalties for breaches of agreement, but such breaches would probably not be numerous.

More serious are certain administrative objections. A fixed agreement for some months might sometimes endanger a particular boy's chance of a better opening: and this would require an agreement to be drawn up, so as, under certain conditions, to allow of the removal of a boy during its currency. As a rule, however, the employer if properly approached would not put obstacles in the way. Probably also the difficulty would be much reduced by establishing a limited number of dates for leaving school, since in this case agreements would be more likely to terminate simultaneously.

In carrying out this policy, there appear to be three possible alternatives—to leave the Exchanges free to promote voluntary agreements on these lines, to fix a minimum period in all occupations, or to do so only in those in which the conditions of employment or the habits of the boys are most irregular. Universal application appears to be impracticable under existing conditions, and at present a combination of the first and third alternatives seems most feasible. In certain of the most dangerous jobs, therefore, no one under eighteen years of age should be engaged for a shorter period than six or twelve months: and the Board of Trade might be given power, similar to that possessed by the Home Office under the Trade Boards Act, to add others to the list by Provisional Order. Elsewhere it would still be open to the Exchanges to promote voluntary agreements for such periods. Probably where compulsion was established, all engagements would have to be made through an Exchange.

A similar policy would certainly have to be adopted in regard to such compulsory engagement of boys through an Exchange. Universal application is the ideal to be

aimed at, but as yet the Exchanges are not sufficiently developed to make this practicable. It would, however, be possible to enforce it in the cases of boys employed in certain classes of work. Already, in London, street-traders' licences are not granted to lads between fourteen and sixteen years of age until they have made application to the Exchange and failed to find other suitable work.<sup>1</sup> Thus, just as under the Factory Acts dangerous trades are subjected to special rules, so forms of juvenile employment that are particularly liable to produce the Blind Alley character could be put under special regulations, such as compulsory engagement through the Exchange and fixed periods of engagement. The adoption of the latter in a trade would probably necessitate that of the former. In both cases it is likely that the policy would from small beginnings become widely extended, and perhaps in time universal.

(v) *The Organization of Other Forms of Employment.*—Similarly, in the case of the skilled trades, the establishment of uniform methods and conditions will not exhaust the possible improvements. Here, too, arrangements can be made to ensure the smooth working of each method of teaching and to guard against its dangers and difficulties.

Some of the chief points may be indicated. In a Formal Apprenticeship a more flexible contract is needed to allow of its termination in case of misconduct on either side without resort to the complicated processes that are at present required. This can be achieved by making the Exchange a party to the Indenture with the power of cancelling it as occasion arises. With the less formal kinds of Regular Service, the Verbal Agreements and Understandings can be made clearer and more definite. Trouble often arises at present from the fact that these are too apt to mean different things to the two parties, and this would be less common if they were more definite. Again, the advantages of a combination of Service and Migration in a three

<sup>1</sup> In 1911 the Council adopted bye-laws prohibiting street-trading by all children of School Age.

or four years' Apprenticeship, followed by work as an improver, have already been described. Its danger lies in the fact that the Short Period of Service may very easily lead to undue specialization. Careful organization of it, however, should make it possible to multiply its adoption and avoid its dangers ; and in time its use might become general. For it appears to be the only possible system that could be adapted to every variety of modern conditions. Uniformity may not be obtainable even in the form of Short Service and Migration. It certainly cannot be obtained in any other.

Again, provision is required for those who start at labouring work and afterwards display fitness to learn a trade. To a great extent supervision whilst at school will alter the conditions and enable many of them to go straight to skilled work. Where it does not, special arrangements might be made to meet their case. At present there is the danger either that their chances will be spoilt or that from lack of regulation too many will enter a trade. Both Scylla and Charybdis have, therefore, to be avoided, and two alternatives suggest themselves. Either the indenture, as in Printing, might be "dated back" over part of the time for which such a boy has already been at work about the shop or office, or upon showing capacity he might be "recognized" as learner or apprentice, with, if necessary, a fixed period of service commencing from the time of such recognition.

The latter device, indeed, is specially designed to minimize the dangers of over-stocking that arise in certain trades, notably Plumbing, in which Following-up prevails. This springs from the difficulty of knowing and still more of regulating the number of plumbers' mates who will try to become plumbers. Every mate is a potential plumber, and only experience can show how many will actually become such or try to do so. The result, therefore, has been to over-stock the trade. Now in many ways Plumbing is adapted to Formal Apprenticeship, but there are two great objections to its universal adoption. The trade is not well suited to young boys and often a chap's capacity for it is not determined until a later age than in many others. Secondly,

and for this reason, Apprenticeship is liable to exclude from it really capable workmen who enter it later. What it requires, therefore, is that, as an alternative, mates shall be enabled, on proving their competence before a proper tribunal, to obtain definite recognition as learners or improvers, and that only those of them who do so shall be entitled to learn it. To be carried out effectively such an arrangement would require an agreement between masters and men as to its conditions, and especially as to the proportion of learners to journeymen.<sup>1</sup>

Finally, the disadvantages of Migration can be overcome by more careful provision for the individual boy. Since he has to change his job from time to time, he needs guidance as to where, when and how to move in each case, and such guidance he can get partly from the Labour Exchange and partly through the Trade School. Co-operation between the two will, therefore, be essential. The latter can report upon his progress to the former and advise him as to the sort of work he requires to do next, and, by its teaching, give him a preliminary insight into each new branch of it that he undertakes. Probably periodical reports to the Exchange from a Trade or Continuation School will play a very large part in the organization of boy labour, and they will not be confined to cases of Migration. It will then be the duty of the former to act upon this information at the right time, to place the boy into the most suitable job available, thus minimizing those intervals of unemployment that are specially frequent and dangerous in Migration. In doing this, fixed periods of engagement for short periods will once again be useful. Even so, indeed, this method will not always work with complete smoothness, but at the worst the improver's progress is likely to be safer and more rapid than it is at present.

(vi) *The Prevention of Intervals between Jobs.*—The importance of avoiding intervals between jobs, however, is not

<sup>1</sup> The arrangements promoted by the Plumbers' Company already do something to secure these facilities, and could easily be extended.

limited to the case of Migration. Juvenile Unemployment is one of the greatest difficulties that has to be faced, and its evil results are even more serious than in the case of adults. Such unemployment is, as a rule, not wholly nor even mainly due to trade causes. Indeed, with some few exceptions, purely industrial fluctuations do not create a very great amount of it, boys being often kept on when men are dismissed. Where they do, the difficulty can, to some extent, be met by dove-tailing with allied jobs in other industries.<sup>1</sup> Methods of Learning, notably Migration, cause more loss of employment, partly because the needs of the boys themselves compel them to move, and partly because their position as wage-earners forces the employer to treat them as such and to dismiss them as soon as business becomes slack. Far the largest share of Juvenile Unemployment, however, springs from personal and social causes, especially the restlessness and instability of the boys themselves.

Much, therefore, depends on the development of better and more regular habits of work, and on increasing their willingness to stick to their jobs. For this in its turn will re-act upon employers. It will be materially assisted by two things, the development of an organization for filling vacancies so that those out of work can be placed in new jobs with a minimum of delay, and the use of definite periods of engagements. Where unemployment is inevitable, the establishment of Schools for Unemployed Juveniles on the lines suggested by Mr. Rowntree is likely to prove beneficial, though probably either compulsion or the granting of certain special privileges will be necessary if attendance is to be secured. Possibly the system of Unemployment Insurance might be extended and receipt of benefit between sixteen and eighteen made conditional upon putting in a certain minimum of time at such a school.

(vii) *The General Regulation of Conditions*.—Finally, to complete the structure, a further general regulation of

<sup>1</sup> As in the case of the woodworkers in the Pianoforte Trades who can find work during their slack months in the Furniture Trades.

Juvenile Labour will be required; and once more the machinery for the purpose will have to be provided by the Exchanges and Care Committees. Where necessary, the former will bargain for as good terms as possible on behalf of the boys and, so far as these are not fixed by statute, make arrangements with employers regarding wages, hours, attendance at Trade Schools and so on. Where legal regulation exists, their duties may well include the promotion of conditions superior to the statutory minimum, and they will still be the controlling authority where these are already above the minimum enforceable by law.

Similarly, they will need on the one hand to follow up cases of exploitation or misconduct, and on the other to promote improvements by agreements with individual employers. For where detailed changes fail to be made merely because the need for them is not realized, much can be done, by calling attention to them, to get them carried out; and something has already been accomplished in this way. Again, many jobs are far too freely condemned as dangerous or injurious, when, as in the case of the Post Office Messengers, they can be converted into quite decent openings. All these things, therefore, will be mainly the work of the Exchanges, whilst the Care Committee will have to keep in touch with the boy himself, his parents and his home conditions, to see that they play their part, to report to the Exchanges misconduct or breaches of agreement, and so generally to supervise them.

Some of the further measures which are needed for the accomplishment of these objects have already been indicated, but stress may be laid upon reports from the Continuation Schools to the Exchanges. These would deal with the general conduct and progress of each boy. They could, perhaps, be made twice annually and would be of great assistance in detecting and preventing exploitation, in recommending improvements to employers, and in guiding the boys themselves. Other possible action consists of the regulation or, if possible, prohibition of juvenile street-trading, at any rate in its more deleterious forms, and of

better provision for the medical inspection of children both when engaged in employment and whilst still at School. The latter would have special reference to their future occupations. Further regulation is also required in the case of those forms of work, such as the lifting of heavy weights, which are specially liable to be injurious to health.

A more debatable point is the fixing of a minimum wage for juvenile workers. London conditions are in many respects favourable to the adoption of such a policy, for nearly all boy labourers and the great bulk of learners are able to secure a starting wage of 5s. per week and many get more. Those who get less form a very small proportion of the whole. It seems possible, therefore, to enact that no boy shall be employed and paid at a lower rate than 5s. for a full week's work, except in return for the grant, to the satisfaction of the Exchange authorities, of special privileges in other directions. It ought not to be difficult to enforce this and to bring the comparatively few employers who pay less up to the minimum level.

The advantage of the change indeed would clearly consist not so much in the actual raising of wages as in its effect on the minds of boys and their parents. They often do not realize that a wage of this amount can usually be obtained together with a chance to learn a trade ; and, not realizing it, are apt to take jobs without prospects at a rate that is little if at all higher. Many also will take 5s. a week but are not prepared to take less : and the fixing of a minimum would thus have the excellent effect of making it clear that it could always be obtained.<sup>1</sup>

Beyond this it is not possible to go for the present. The establishment of a different minimum for each year of age, or for each grade of work, is not practicable, since it would require a far " tighter " organization of boy labour than we possess. But, for London at least, it is possible to set up a minimum of 5s. below which no boy shall be employed. Above this the settlement of rates must be left to the

<sup>1</sup> It would not always be possible to apply this particular rate uniformly in all other districts.

employers and boys, or rather to the collective bargaining of Juvenile Advisory Committees on behalf of the latter.

(viii) *Summary*.—This concludes the treatment of the Organization of Boy Labour. The various measures required will be summarized in a later section of this chapter. Here it will be sufficient to indicate one or two general considerations which require emphasis.

First, the supreme necessity is not merely to establish certain regulations and forms of control, but to encourage and develop good industrial and social habits. This involves not only the creation of them in the individual boy or employer, but that better methods of training and employment should become as much the habitual things as are the existing haphazard ones. In many directions stress has already been laid on the importance of habit—of that of steady, regular, disciplined work in the case of all boys and more especially of boy labourers, and of that of preferring the more to the less systematic methods of teaching in the case of employers. Reforms only operate through their effect upon the actions and character of men. They become successful when these actions grow into new good habits that displace the old bad ones. They become permanent when these habits grow into second nature.

Secondly, to be successful, the organization of Boy Labour requires the support of all classes—employers, foremen, parents, boys, officials—and must therefore be adapted to suit the needs and meet the wishes of all. The convenience of each class must be consulted and measures which clash badly with the interests of any one of them stand condemned. A new and complicated organization can only be worked by general co-operation, and the hostility of even one of the elements affected is likely to be fatal. For these reasons proposals for establishing a system of half-time for all children under eighteen have to be rejected. The inconvenience and trouble to the employer is very large, the foreman's control of his boys is interfered with, and the benefits aimed at can be obtained by methods that avoid these difficulties.

Moreover, one can confidently expect that the interest and co-operation of the great bulk of employers will be readily obtained. There are and must always be some bad ones and others who will not take trouble ; but these are a minority, and usually a very small one. Further, the fact that the great body of them have not responded readily in the past, when approached in the wrong way or from the wrong quarter, proves nothing. What is more to the point is the consideration that, whilst general conditions make exploitation easy, there is so little deliberate exploitation, and that the vast proportion of the trouble is the result of mere muddle and confusion. In short, the sympathy and support of employers is to be had for the asking, if only those who are seeking it know how to ask ; and they must be obtained if the problems of Boy Labour are to be successfully dealt with.

Finally, success will depend very largely on the development of the existing system of Exchanges and Care Committees. For, as regards the Organization of Boy Labour, they are the pivot upon which everything else turns. Now the Exchanges and, on the whole, the Care Committees are still to a great extent in an experimental and undeveloped stage, and as a result they have still to gain their experience and to obtain acceptance and support both from employers and workpeople. Probably less than one-third of the boys leaving school enter their names at the Exchanges and still fewer make regular use of them. So, too, employers as a whole do not realize their value, and many make at best only a casual and occasional resort to them. In both respects, however, they are already making considerable progress.

Now, to carry out a really successful organization of Boy Labour, they need to be able to commend themselves as a business proposition, which it is worth the while both of employers and workpeople to make full use of. Their immediate work, indeed, is to develop and improve their own organization, increase the amount of their business and prove themselves a valuable aid to the conduct of industry

and the finding of jobs ; and the future of Boy Labour must depend on this.

Improvement, therefore, must to a great extent depend upon and go hand-in-hand with the gradual extension and development of the work of the Exchanges, and, indeed, some of the proposals that have been outlined will have to await this. Others can be adopted at once. But it is the task of the enquirer not merely to suggest reforms that can be immediately carried out, but to point to others which are desirable and under certain conditions feasible, and to indicate what these conditions are. This is certainly true in the present case. Much of the necessary machinery already exists. What is required is to make it work and to put it to " its most developed use," and it is as important to make the best of what we already possess as it is to supplement it by further improvements.

(b) **Industrial Education.**—The second main branch of the problem is concerned partly with the improvement of industrial training in the workshop and partly with such a reorganization of general education as will bring boys to the threshold of industrial life, as fit as education can make them for the part they are to play in it. This does not mean that the Elementary or even the Secondary Schools are to teach actual trades or businesses, but that they shall take proper steps to discover, prepare and develop industrial or commercial aptitudes, and that they shall give a literary and general education sufficient in quantity and of the right kind to help their boys to make the best of themselves at their work, and in short that they shall fit them to use to the best of their powers whatever talents and abilities they possess.

The former section of the problem again falls into two parts. There is first the requisite improvement in the actual methods of teaching different trades in the workshop, and secondly the provision of the instruction necessary to supplement this in Trade and Continuation Schools. The former has been dealt with already. It is very largely a matter of organization, and what is required is the gradual

evolution of regular systematic methods, suited to the varying needs of different trades, to replace the existing jumb'e and confusion. Concurrently with this, moreover, it will be possible eventually to secure both uniformity and a gradual improvement in the accepted standards of teaching. What remains to be considered under this head, therefore, is the problem of improving "industrial quality" generally by means of technical or similar training.

This applies as much to the less, as to the more, skilled grades of labour. These, as already described, are specially liable to cause the workers to grow up without possessing either command over any particular job, or the power to work steadily at it, or the capacity to adapt themselves to changing circumstances. Those affected by the first two causes fall into three classes. To begin with, there are many who have grown up without knowing any job to which they can turn their hands, and without any power of steady and regular work. These, the worst cases, consist of men who during boyhood have changed their jobs so frequently as to fail to learn anything at all. To do so several times within a single year is by no means uncommon. In after life, therefore, they sink to, and overcrowd, the lowest ranks of casual, unskilled labour. Others, again, have worked steadily throughout boyhood at simple boys' jobs, but have not fitted themselves for anything else after these come to an end. They thus reach manhood able indeed to work steadily and regularly, but knowing nothing in particular at which they can work. Sometimes they sink almost at once into casual labour, whilst, if they find and then lose low-paid regular work, their lack of adaptability causes them to do so later on. Lastly, there are those who have mastered some occupation but have failed to acquire regular and disciplined habits. The results are most serious in the first case, but in all there is failure to develop either good habits, or industrial capacities, or the power of adaptation to altered circumstances; and with these men, as with the skilled workers, the need is largely for organization, control

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and education to secure these things, more particularly the last.

For one of the greatest needs of the workmen of to-day is this adaptability to change. Under modern conditions trades and jobs are continually undergoing a succession of small changes, which require corresponding development in their powers, and unless this is forthcoming from a man, he is apt to be replaced by others.

Lack of it is both more frequent and more disastrous in the lower grades. The work of the mechanic renders him naturally more adaptable, though not always sufficiently so. Small changes in a skilled trade have less effect and seldom lead to displacement, though a big one may do so. A comparatively slight alteration, on the other hand, may completely change a low-skilled job, and such work too often produces incapacity to meet this. The labourer and the semi-skilled, therefore, need to acquire greater power in this respect. Better organization will do much by making them steadier and more regular workmen, whom it is more worth the employer's while to adapt to new jobs; but improved education will do more. In this both the Elementary and the Continuation Schools must take their share.

The necessary educational changes may perhaps be best considered by starting with those which affect the former. Their teaching needs to take proper account both of industrial and of commercial life. Until recently there has been an undue bias in the direction of the latter: or at least whilst it has been fairly provided for, sufficient has not been done for the former, or to prepare for manual work those who are intended for it by nature. By this I do not mean that the Elementary School as such should teach directly individual trades or commercial employments. It can, however, give a general training to develop manual and industrial capacities, just as in giving a literary training it helps to prepare for a commercial career. Thus it is possible to train the eye and hand, to give the power to use and handle certain tools in common use, and to educate in this direction as well as in the other.

Further, whilst up to a certain age education must be as general as possible, it is afterwards advisable to give what is called a "bias to the curriculum." Where this is done, boys are divided as far as possible into those intended for industrial and for commercial careers: and their education is planned and organized to give a preliminary preparation for one or the other, but without teaching a particular calling. With an industrial bias, for instance, general education goes on, but the old subjects are now studied and taught with particular reference to the general requirements of industrial work, and a large place is given to manual training, drawing, and the sciences bearing upon industry.<sup>1</sup>

Something has already been done by the London County Council, both in providing manual training in connexion with the ordinary Elementary Schools, and in establishing Central Industrial and Commercial Schools for the abler boys, of which sixty are proposed and forty-eight actually sanctioned. Education in them is to last till the age of fifteen. This question of Central Schools, moreover, has an important bearing upon two others—the better education of the more capable lads and the more complete ascertainment of the craft or calling best suited to every one of them. As regards the former, the existing Elementary School teaching sometimes fails to develop the abilities of the best boys beyond a certain point. Even with the addition of the smaller Ex. VII Standard, headmasters sometimes complain that they learn all that the curriculum can teach them even before they reach the age of fourteen, and for this reason oppose their retention at the Elementary School after that age, not because further education would not be beneficial, but because there is nothing further to be learnt there, since even before this they have been practically marking time. As a result it is not possible to recognize or develop effectively their special aptitudes, and for them some particular "bias" is even more needful than it is for the rank and file.

The need for the discovery during his school days of a

<sup>1</sup> In the Central Schools established by the London County Council from ten to twelve hours weekly must be given to "practical" work.

boy's capacity and of his probable future calling has already been dealt with. Here it is only necessary to point out what the improvement of Elementary Education can achieve in this direction. We both must, and more often than not can, discover the class of calling, the grade of labour, and less frequently the particular trade for which he is suited : and the suggested changes can make this choice both more definite and more exact. The development of manual training will help in the first place to show different boys' powers " with the tools." The Central Schools will for their own purposes require a careful testing of their capacities and the keeping under observation of doubtful cases. Finally, their special industrial or commercial training will make it far more possible to determine exactly what each of them should go to, and will assist far more of them to know their own minds clearly before they start work.

Once again, much of what requires to be done will be achieved by the development of existing policy and institutions, but the system of Central Schools needs a very wide extension. Valuable as they are already, their training is only enjoyed by a limited number of picked boys. These it is true are likely to profit most by them, but the benefits they receive should be placed within the reach of others. Two things are required, therefore. First, every boy who reaches a certain standard and a certain level of general capacity should be transferred to a Central School to attend the course there for a fixed period of years. Secondly, those who do not attain this level must also be provided for, since they also need preparation for their work, though of a different kind and quality. Up to a point this could be provided within the Elementary School itself, but their removal from it before they reached the age of fourteen or fifteen would be preferable. For their use a Second and Lower Grade of Central Schools should be established with a separate curriculum. To these they should be sent at a certain age, possibly for a shorter period of years.

The results of the new system, therefore, would be to divide Elementary Education into two parts : general educa-

tion up to the age of eleven or twelve which would include an increased amount of manual training, and following this a course at a Central School with either a commercial or an industrial bias. The latter would be divided into two grades with possibly a shorter length of course in the lower one, and would be used to cover all boys. To make the system effective it would probably be necessary to extend the school age to fifteen, a policy which also deserves support on many other grounds.

Last of all, it is necessary to ensure that the fullest and best use shall be made of our existing system of education. Some of our present difficulties are due to failures in this direction rather than to actual defects in the system itself. So far, therefore, improvement can be brought about by putting boys into a position to take the fullest advantage of it. At present they frequently do not do so, largely as a result of engaging in some form of work during the years of school life. Of this one may distinguish three kinds—half-time after the age of twelve, street trading, and other kinds of employment out of school hours. Such work has two chief disadvantages. It prevents boys from getting the fullest value from their education, and it is apt to produce serious moral and industrial defects.

The half-time system is scarcely a London problem, since it has practically ceased to exist there, and is found mainly in certain centres of the textile industry. It causes the children's education to be reduced by one-half at too early an age; they are too tired to take full advantage of what they still get; and their presence often helps to retard the progress of the classes in which they are placed. Further, it is also alleged that the atmosphere of the factory has a bad general effect on the half-timers and they in their turn on the schools which they attend. There is a strong case for the abolition of the system.

Unlike half-time, street trading was until recently an even more serious problem in London than in most other districts. It covers one large and important occupation, namely newspaper selling, and several smaller ones. Of the

22,194 licences issued in England and Wales (exclusive of London) in 1908, over 16,000 were for the sale of newspapers, whilst in London 6,780 out of about 15,000 badges were granted for this purpose. At this time both in London and elsewhere the great majority of street traders were between the ages of thirteen and fourteen. In 1911, however, the London County Council enacted a series of Bye-Laws,<sup>1</sup> under the Employment of Children Act 1903, by which it prohibited the employment of children of school age in this way. This policy might well be made general.

The matter, however, may be considered in a little more detail. Street trading and more particularly newspaper selling possess to the full all the disadvantages of juvenile employment, educational, industrial, and moral. As I have said in another connexion :<sup>2</sup> "Of the various forms of child employment Street Trading shows the greatest dangers and least advantages, and the selling of newspapers in the street focuses all the evils of street trading." These evils were strikingly exemplified in the report of the Departmental Committee<sup>3</sup> that dealt with the subject a few years ago. Thus the Majority Report stated :

"The effect of street trading upon those who engage in it is only too frequently disastrous. The youthful street trader is exposed to many of the worst of moral risks : he associates with, and acquires the habits of, the frequenters of the kerbstone and the gutter. If a match seller, he is likely to become a beggar—if a newspaper seller, a gambler. . . . At any rate in crowded centres of population, street trading tends to produce a dislike or disability for more regular employment : the child finds that for a few years money is easily earned without discipline or special skill : and the occupation is one which sharpens the wits without developing the intelligence. It leads to nothing permanent, and in no way helps him to a future career. There can be no doubt that large numbers of those who were once street traders drift into vagrancy and crime. Chief constables testified that street trading is the most fruitful apprenticeship to evil

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<sup>1</sup> These Bye-Laws are printed in full in Appendix VII.

<sup>2</sup> *Economic Journal*, September 1910.

<sup>3</sup> Cd. 5229 of 1910.

courses. These results are specially noticeable in the case of children who have continued street trading after leaving school. Many boys who trade, particularly in newspaper selling, while still at school, take up regular employment of a different kind when they leave school. But much evidence was given to the effect that the practice of street trading, even though only carried out in the intervals of school attendance, tends to produce a restless disposition and a dislike of restraint, which make children unwilling to settle down to any regular employment."

The views of workers dealing especially with the street traders bear strongly in the same direction, more particularly as regards the difficulty of reclaiming those who take to, or continue, it after leaving School. That it creates large numbers of loafers, gamblers and petty criminals is also insisted upon.

The Majority Report proposed complete prohibition by statute in the case of boys up to the age of seventeen. The Minority concurred with the Majority as regards the effects of street trading. It did not, however, recommend complete prohibition, but preferred strict regulation, with the grant of powers of prohibition to the Local Authorities in certain cases. As regards girls, both reports condemned the evils of the system and insisted upon its moral dangers "in the narrower sense," and both recommended its statutory prohibition in their case up to the age of eighteen, with one reservation for further enquiry in the case of the Minority.

Considerable progress has been made in some districts, with the regulation of the child street trader, and more particularly in London, especially since its prohibition in the case of children of school age. But it is more than doubtful if the problem can be effectively dealt with in this way, and both Reports maintained that it could not. Complete abolition seems, therefore, to be the only effective policy, and bills to carry this out have been introduced into the House of Commons, by private members in 1912 and by the Government in 1913, but each of them has been abandoned from lack of time.<sup>1</sup> The urgent necessity for

<sup>1</sup> The Children (Employment and School Attendance) Bill of the present session, which has already passed Standing Committee

such a measure is admitted. It would, however, be an improvement if a uniform age-limit of eighteen were fixed for both boys and girls to make the period of prohibition for street traders the same as that of control under the Factory Acts and as that proposed for the supervision to be exercised by Juvenile Exchanges and Care Committees.

Other cases of employment out of School Hours do not have the same evil effects, industrially and morally, as street trading, and may even be in themselves harmless. But their influence on education and sometimes on health and physique may be serious. Such occupations include the delivery of newspapers, milk, bread and other goods, and altogether embrace a considerable variety of jobs. The work is done before the school day begins and after it ends, on Saturdays and parts of Sunday. The hours are often excessive, and, except in very moderate amounts, it is apt to interfere seriously with progress in school and sometimes to cause permanent injury by over-taxing the strength of the children. Moreover, so far as town work is concerned, such employment seldom or never teaches anything that will be of value in later life. Its strict limitation to a maximum of at the outside ten or twelve hours a week, should therefore be insisted upon, and then it should only be permitted when the need of such earnings can be clearly demonstrated. The employment of school children in agriculture, however, stands in quite a different position.<sup>1</sup>

Finally, the policy of granting to the abler children Labour Certificates to entitle them, on reaching a certain standard,

A, prohibits all street trading by male children under the age of 15, except such as "before the passing of the Act were lawfully engaged in street trading." Boys between 15 and 17 can only engage in it if they hold a licence from the local authority. It is prohibited in the case of girls under 18. These provisions, however, do not apply to rural district councils, or to any borough or urban district council which is not a local education authority.

<sup>1</sup> The following maxima were fixed by the London County Council in 1906 and included in the revised Bye-Laws of 1911 :—

Children liable to attend school full time, 20 hours, in any week in which the school is open more than two days, and 30 hours in any week in which it is open two days or less.

to leave school and go to work needs careful reconsideration. Even under present conditions it seems doubtful wisdom to cut short in this way the school careers of the ablest boys even though there is sometimes little left for them to learn during the last few months of their time at school. When, however, means are provided, as by Central Schools, to make the very best of them up to the very day of their leaving, their interests require that they shall continue their education as long as possible: and all such exemptions should be abolished except in very exceptional circumstances.

Finally, there is the question of raising the age of leaving school from fourteen to fifteen in London, and first to fourteen and eventually to fifteen where the age is at present lower. Probably this will be rendered necessary if the fuller development of manual and artistic capacities is to be fully accomplished and the proposed system of Central Schools completely carried out. The change, however, can also be recommended on general grounds. It will enable education to be made more general and complete, and will allow what is taught to be better, and therefore more permanently, assimilated. By being kept at school till the later age, boys, being older and more experienced, will be better fitted, when they leave, to look after themselves and avoid the dangers of industrial life. Thirdly, it will give longer time and better opportunity to discover the walks in life to which individually they are best suited, and to make them realize by the time they start work what their needs and objects are and how they are to be attained.<sup>1</sup>

Should this proposal be carried out, moreover, it could with advantage be accompanied by some increase in the hours of attendance at school. One great difficulty of the present day is the sudden transition to the long hours of

<sup>1</sup> The Children Bill of the present session raises the school leaving age to 14 in all cases in which it is at present lower, and gives Local Education Authorities the power to raise it to 15. For the most important provisions of this Bill see Appendix VIII.

the workshop. This must be met partly by reducing the latter, but an increase in those of the school itself after fourteen, or even after thirteen, would help largely to bridge the gap.

To sum up, therefore, the chief developments required in connexion with the system of elementary education, include first the establishment of a sufficient number of Central Schools of a higher grade with an industrial or commercial bias to discover and develop the special capacities of the abler boys, and of similar ones of a lower grade for all others over a certain age. The needs of the latter can also be met in part by giving a wider range to the teaching of the ordinary elementary schools, and this will also be needed to provide a more all-round development for the younger children. To this must be added the abolition of street trading, the strict regulation and limitation of other employment out of school hours, the restriction of the grant of Labour Certificates to exceptional and urgent cases, and the raising of the school-leaving age from fourteen to fifteen. Further, an extension of the system of scholarships and maintenance grants may very likely be necessary to meet cases of hardship due to extreme poverty or exceptional misfortune.

There still remains the consideration of how far and in what way further instruction can be provided after school days are over and working life has begun. This is needed first for the purpose of continuing and making permanent what has been learnt in the Elementary School, since under present conditions much of it is unlearned or forgotten in the years that immediately follow. Secondly, the workshop has always required its teaching to be supplemented, but it requires it now to an ever increasing extent, partly because modern conditions prevent it from doing the work completely and partly because of the growing need of general and scientific knowledge, which falls outside its scope.

Here one may consider the Day Trade School. Its work has been fully described in a previous chapter. It seeks

during a three years' course to combine a continuance of general education with instruction in the general principles common to certain industries, and in the last year with the teaching to the students of the principles and rudiments of the particular trade selected by the pupil. Its advantages include careful choice of an occupation, fuller instruction in its general principles and in its relations to allied trades than is possible in the workshop, and the keeping of boys under careful discipline and control, and away from the workshop, for the two or three most critical years of their life.

Conditions of production only give real scope for the utility of a Day Trade School in certain industries which can be carried out fully inside its walls. But it is specially valuable where work of high artistic merit is required or costly material is used, or where for any reason the employer needs boys with greater knowledge and sense of responsibility than they usually possess at fourteen.

Moreover, even upon the small scale upon which they have hitherto been established, these Schools have achieved considerable success. They have, however, been limited to a comparatively small number of boys, who are mostly destined to fill the higher posts in industry rather than those of the ordinary artisan. An increase in their number and size, therefore, to cover at least a considerable proportion of the men engaged in the trades to which they are suited would have beneficial results, especially if accompanied by an extension of the scholarship system to meet the case of those who would otherwise be too poor to take advantage of them.

But for the lower grades of labour, and for the bulk of those in skilled employment, means of further education and trade instruction must be obtained by means of the extension and improvement of existing Continuation Schools and by the provision of facilities for utilizing them. At present something like one-quarter of the boys between fourteen and twenty years of age are found to be making some sort of attendance at some kind of Evening Schools whilst perhaps one-sixth are making regular and effective

attendance over a sufficient period to give it permanent utility. Thus the present voluntary system fails to reach the great majority of the children, and more particularly those who require the teaching most. It also fails to secure regular and permanent support from a considerable number of those who do join the classes.

This is partly due to too long hours or too frequent overtime, partly to the numerous counter-attractions of London life, and partly to the long summer vacation and the consequent refusal to enrol students within the preceding weeks. Under the voluntary system the last is probably unavoidable, so that compulsory attendance is required if the difficulty is to be overcome. It accounts for a large number of those who drop off between one session and the next and retards, often seriously, the progress of those who do not.

Moreover voluntary attendance seriously hinders the organization of the teaching on the most efficient lines. Students are free to come or go at their pleasure, and can take such instruction as they please. It is often difficult therefore, to get them to study the theoretical aspects of their trades, or to acquire scientific knowledge bearing upon them, or to accept a definite course of instruction. The London County Council is, however, under a recent scheme for reorganizing its Evening Continuation Schools,<sup>1</sup> attempting to establish and make compulsory a course system in a large number of its institutes, and the result of the experiment will be awaited with interest. It certainly deserves success. The course only lasts for a single session, and one that extends over a number of years is much to be preferred.

For continued education needs to be carefully organized so as to cover a long period, since the kind of instruction required varies with the age and occupation of the student. Probably for the first year (or two years if the age of leaving is kept at fourteen), the teaching should continue to be on lines similar to those adopted in the central schools; and with the lower grades it will continue to be so throughout. It

<sup>1</sup> See Chapter XIII.

will include, however, enough of general manual training to secure the adaptability of the worker and to give him sufficient command over tools for ordinary domestic purposes. With those employed upon skilled work, on the other hand, trade or technical teaching should occupy a large share of the time, at any rate after the age of sixteen is reached.

For a variety of reasons, therefore, it appears necessary to arrange for compulsory attendance at Continuation Schools from the time of leaving the elementary schools up to the age of eighteen by all children, other than those who are suitably provided for in Secondary or Day Trade Schools. The age of eighteen is suggested rather than the more usual one of seventeen, for the purpose already noted of securing a uniform period for the control of young persons. Weekly attendance should be compulsory to the extent of six or eight hours per week, the shorter period being enforced up to the age of sixteen and the longer one afterwards.

The course of instruction would then be arranged to cover the whole period on the lines already laid down, and the proper co-operation of Trade and Technical Schools with those giving more general education would be provided for. There would, as with the Central Schools, be separate organization to meet the needs of industrial and commercial employments. The long summer break would be avoided and attendance for the specified periods would be compulsory for about forty-five weeks in the year.<sup>1</sup> The curriculum would probably need to include provision for such matters as gymnastics and physical culture.

Special arrangements could also be made to provide schools for Unemployed Juveniles on the lines laid down by Messrs. Rowntree & Lasker,<sup>2</sup> and for the ordinary Evening Schools to act in concert with the Labour Exchange and After-Care System. They would thus be able by means

<sup>1</sup> A Bill (No. 108) introduced into the House of Commons in the session of 1913 suggested not less than forty-four weeks.

<sup>2</sup> *Unemployment: A Social Study*. By B. Seebohm Rowntree & Bruno Lasker. Chapter I.

of periodical reports as to the progress of the boys to assist materially in making supervision and control effective. For these purposes, reports upon each boy should be remitted twice annually to the Exchange, and special reports should be made as occasion required. In addition to this the instructors will necessarily play a great part in advising the boys themselves as to changes of situation and as to the general progress of their work.

Moreover, to carry out such a system with reasonable hope of success and without placing an unfair burden on many of the boys, some readjustment of the hours of employment will be necessary, since those at present in force often prevent attendance altogether or impose an undue strain upon such as make it. With existing hours, indeed, compulsion would almost certainly fail to achieve its objects. Some very drastic proposals have been made, but what seems feasible is the fixing of a definite maximum week for boys and girls under eighteen, which to begin with might be forty-eight hours per week, with subsequent reductions to forty-five or even to forty-two.

In addition to this all spasmodic and irregular overtime should be prohibited, except in very exceptional circumstances. At the same time an arrangement might be adopted, similar to that in use under the Factory Acts, by which a limited amount of overtime is allowed in certain industries for not more than a certain number of days in the year. Similar permission should be given in the case of boy labour at certain prescribed periods varying with the trades concerned, but only on the condition of a corresponding reduction at some other time. In such cases the weekly attendance at School might also vary with the hours of labour.

Very great care would have to be taken to meet the wishes of employers and arrangements would have to be made for special cases, such as those of men and boys working in pairs. It should be permissible, for instance, though not compulsory, to employ double shifts of boys, each for half-time. In this case additional provision for school attend-

ance would have to be made. Similarly, various alternative forms of attendance at Continuation Schools should be allowed so far as is consistent with educational and administrative efficiency. The success of the whole plan will depend on the support and co-operation of employers, and therefore, as a matter both of policy and justice, every effort must be made to consult their convenience and put these changes in operation in such a way as to reduce friction and inconvenience to a minimum. Both employers and workpeople would, of course, receive adequate representation upon the councils of the various schools and a fair share in determining their policy.

In this connexion somewhat fuller consideration may be given to the hours of Continuation School Attendance and to the form which the reduction in working hours shall take. As regards the former, times which immediately follow the close of the day's work or which provide for the boys' absence during the last hours of it are likely to secure them the maximum of benefit and at the same time to cause the minimum of disorganization in the workshop.

As a normal thing, therefore, hours of attendance will probably begin between 5.30 and 7 and close between 7.30 and 9. Various alternatives will, however, be possible, and care must be taken to avoid fixing times which will unduly break-up, or interfere with, the working day. In this respect the Continuation Schools Bill introduced last year<sup>1</sup> erred somewhat badly, since by limiting attendance to between the hours of 9 a.m. and 6 p.m., it would have caused an unnecessary amount of inconvenience. Possible variations include arrangements to allow of absence for two half days per week, or the working of a five day week with a free Saturday, or the making of the necessary reduction by excusing attendance before breakfast on the days following the classes. In any case a varied and flexible system will be necessary if the combination of compulsory Continuation Schools and reduced hours is to prove workable.

<sup>1</sup> No. 105 of 1913.

## III. SCHEME IN OUTLINE.

A brief summary of the general proposals already discussed will give greater clearness to the whole scheme. It will include not only proposals for legislative changes, but indications of the ends at which administrative action should aim and suggestions for improving the existing machinery from within.

(a) **The Organization of Boy Labour.**

(1) *Existing Organization.*—First of all, there is required an organization to deal with the general care, control and supervision of boys and with their employment, upon the lines already indicated. For this the necessary machinery is actually in existence in the Juvenile Branches of the Labour Exchanges, acting through Juvenile Advisory Committees, and in the School Care Committees. To a great extent, therefore, the problem is mainly an administrative one, to get what already exists into full working order, to obtain for it the support both of employers and boys, and so enable it to extend over the whole field the principles of regulation and supervision that it is beginning to establish. Much also has still to be done to perfect the co-operation between the Exchanges and the Care Committees. There has also been some dispute as to which authority should have supreme control over the whole organization, but happily the two central authorities concerned, the Boards of Trade and Education, have come to a working arrangement on the matter, and the functions and duties performed by and under each of them are much the same, whichever is the nominal head.

(2) *Uniformity of Method.*—The objects of the Labour Exchange should include that of securing uniformity in the methods of teaching each trade or branch of a trade, so that definite standard conditions could be gradually secured in it. This does not mean the application of one unvarying system to all trades, but the adoption in each of them of a single method of training suited to its needs. Once uniformity is established, moreover, it will be far easier to raise and improve gradually the standard of teaching, and such

uniformity will extend to wages, hours and conditions of employment. At first, however, certain modifications will have to be allowed.

(3) *Juvenile Trade Boards.*—In certain cases these objects could be best attained by bringing together representative employers and employed to consider the problems of juvenile labour in their particular industry, and to come to agreements as to the conditions of employment and teaching that shall be recognized. The Exchange would then attempt to promote the voluntary adoption of them throughout it. The establishment of Juvenile Trade Boards with compulsory powers to deal with these matters is also ripe for discussion. Their formation must, indeed, await the fuller development of the Exchange System, and this will very probably render them unnecessary in the majority of cases. Certain trades, however, may prove incapable of the necessary organization by voluntary means, and here in the last resort Trade Boards with compulsory powers could be set up; but this is a policy for the future rather than for the immediate present.

(4) *Improvement in Particular Methods.*—Most of the existing ones have certain definite defects. Formal Apprenticeship is often too rigid and should be made more flexible by allowing the Exchange to be a party to the indenture with power to break it on due cause being shown. Verbal Apprenticeships and Understandings are often too indefinite and mean different things to the parties to them. They should be made clear and definite, so that each side should understand what is involved. In Migration stricter control and guidance of the individual is required: and careful arrangements should be made for procuring the co-operation of the Trade Schools in the provision of this.

(5) *"Following-up" and "Recognition."*—One great danger of this method is that of over-stocking a trade owing to the difficulty of regulating the numbers who enter it, and the right of a mate or assistant to learn it should be made conditional on obtaining Recognition. That is to say, he would have to satisfy a competent authority of his capacity

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for the work, and on doing so he would be accepted as a Learner. This authority should, if possible, be a joint board representing masters and men, and within limits should have power to regulate the numbers entering a trade. In some cases (e.g. Plumbing) such entry might be made partly by Formal Apprenticeship and partly by Recognition.

(6) *Dating Back*.—In some firms in which learners are already employed under a definite agreement, capable boy labourers are also taught the business. Such arrangements are to be encouraged and would be facilitated if power were given to date back the agreements in such cases over part of the time during which such boy labourers have already been employed by a firm.

(7) *Dovetailing*.—Where employment in a particular job is not likely to be permanent, particular attention should be paid to ensure that boys engaged on it should have some definite aim in view and also have ready for them, when they leave it, work to which they could go, and this should, if possible, be of a kind for which their previous employment had fitted them. So far as possible arrangements should be made for their transference to other jobs within the same factory, for the use of temporary jobs in other cases to fill up the time whilst they wait for something better, and for making the jobs themselves actually permanent.

(8) *Co-operation with Employers*.—An increase in the staff of the Labour Exchanges is required for the better carrying out of their work in connexion with boys. Among other duties the increased staff should make systematic efforts to approach employers, to gain their support and sympathy, and to induce them, individually as well as collectively, to bring about changes and improvements in their methods of employment.

(9) *Industrial After-Care*. In London this is limited at present to visits to the homes of boys in work. It should be extended either by sending employers cards to be returned with particulars as to their progress,<sup>1</sup> or, better

<sup>1</sup> Experiments in this direction have already been made.

still, by periodical visits to them by members of the Care Committees concerned, as is done in Birmingham.

(10) *Extension and Re-organization of Duties of Care Committees.*—These require to be increased in various directions, as, for instance, by approaching children and their parents more systematically before boys leave school, and after they have left by Industrial After-Care. These requirements have been fully described earlier in the chapter. There is already a shortage of voluntary workers. If, therefore, these additional functions are to be efficiently performed, a new division of duties will have to be made between them and the paid organizing staff. The work of dealing with the children up to the time of the despatch of the School Leaving Report to the Exchange should be carried out by the latter. Subsequent supervision, including Industrial After-Care, should remain with the former. Increases in the paid staff will be necessary. To meet the difficulties arising where a child's home is at a great distance from the school he attends, arrangements should be made for transferring those so situated to the supervision of Care Committees working in their immediate neighbourhoods.

(11) *School Leaving Reports.*—Measures should be taken to ensure the full and detailed filling-up of these: and to secure this payment should be made to the Head-teachers for each report so filled in. In return for this the Labour Exchange should have the right to compel the provision of adequate information.

(12) *Observance of Standard Requirements.*—When these changes have been accomplished the Local Education Authorities, in London the Education Committee of the County Council, should be given power to enforce certain minimum standards to be observed by the Care Committees and Head-teachers in carrying out this work and to alter and amend them from time to time. Local Authorities in their turn should be under the control of the Board of Education, which might be well advised to draw up a set of model rules for their use.

(13) *Period of Control.*—The control of the Education Authorities and Juvenile Branches of the Labour Exchanges over young persons should continue until the age of eighteen, instead of seventeen as at present, making this age uniform with that adopted under the Factory Acts. Apart from this, extension of control to the later age would have many advantages.

(14) *Continuation School Reports.*—On the establishment of a system of universal compulsory Continuation Schools, the various teachers in them should transmit to the Labour Exchange concerned reports dealing with the progress of the boys under their charge. These reports should be made twice annually, and on special occasions as required. Adequate payment should be made for the work involved.

(15) *Trade Schools for Unemployed Juveniles.*—Measures should be taken to secure the attendance of unemployed juveniles at Trade or Continuation Classes for a fixed period daily: and classes specially for this purpose should be arranged at the different schools. To ensure their attendance, some form of Unemployment Insurance should be adopted for all juvenile workers in which payment of benefit would be dependent on making the requisite attendances.

(16) *Medical Inspection.*—There should be increased medical inspection of elementary school children, with special reference to their future careers, and of young persons engaged in employment. So far as possible the work should be done by the same persons. Certifying surgeons should have additional powers of restricting or conditioning the work on which particular children are to be employed and of preventing their employment in lifting and carrying weights so heavy as to be dangerous to health.

(17) *Special Rules for Industrially Dangerous Occupations.*—In cases of employments which are likely, by reason of irregular conditions or other causes, to be injurious to the industrial prospects of the boys engaged in them, the Board of Trade should receive powers to publish Special Rules for regulating them. These powers would include that of per-

mitting the engagement of young persons for such employments to be made only through a Labour Exchange, and that of fixing a minimum period of engagement. This would usually be of six months or a year's duration. Certain definite jobs, such as those of van boys, rivet boys, and lather boys in barbers' shops, might be dealt with originally and the Board might be given power to add to their number by Special Order. In some cases it might also be laid down that no boy should continue to work at such a job after the age of sixteen.

(18) *Fixed Periods of Engagement: Compulsory Engagement through a Labour Exchange.*—At present universal adoption of these is quite impossible, though they can be applied to particular trades in the manner just described. Eventually, however, with improved organization it might be practicable.

(19) *A Minimum Wage for Juveniles.*—It should be enacted by law that, for the future, no child over the age of fourteen is to be employed full time for less than 5s. per week. This should be a matter for legal enactment. In the case of the Leaving School Age being raised to fifteen, the minimum should be 6s.

(20) *Employment of School Children.*—Street Trading in the case both of boys and girls under the age of eighteen, and the half-time employment of children of school age, should be prohibited. The granting of Labour Certificates to boys and girls on reaching a certain standard and a certain age should be abolished or only given in exceptional circumstances. Employment of children of school age out of school hours should be limited to a maximum of twelve per week and should be confined to children whose home circumstances make their earnings essential.

(b) *Industrial Education and General Education in Relation thereto.*

(21) *Reorganization of Elementary Education.*—To meet the needs of industrial as well as of commercial life, this requires to be reorganized on the lines already laid down. First, by developing such branches of teaching as manual

training, it should seek to cultivate the manual as well as the mental capacity of all the boys, and to train the eye and hand as well as the mind.

(22) *Central Schools*.—For all boys over a certain age sufficient Central Schools should be provided in which the instruction should have an industrial or commercial bias. Their aim should be to prepare boys generally for the branch of employment, i.e. industrial or commercial, that they are going to take up, but not to prepare them for particular trades. Such Schools should be divided into two grades—a Higher Grade for the abler boys on the lines of the existing Central Schools and a lower one for the rest, specially adapted to the needs of those who will enter low-skilled work.

(23) *The School Leaving Age*.—This should be raised at once to fifteen in London and in any other districts in which it is at present fourteen. Elsewhere it should be raised immediately to fourteen and after a few years to fifteen. After the age of fourteen, or even thirteen, school hours should be increased.

Turning to education continued after the close of the years of Elementary Schooling, we get—

(24) *Day Trade Schools*.—The extension of these should be carried out in trades in which the conditions are favourable to them, so as to provide for a far larger number of learners. The number of Scholarships in connexion with them should be increased proportionally.

(25) *Compulsory Continuation Schools*.—Attendance at these should be made compulsory for all boys under the age of eighteen, who are not otherwise satisfactorily provided for, for not less than about forty-five weeks in the year. The weekly attendance should be from six to eight hours per week. The teaching should be adapted to the ages, occupations and abilities of the various students, and close co-operation between ordinary Continuation Schools, Trade Schools, and Technical and Commercial Institutes should be organized. Provision should also be made in the curriculum for such things as physical drill and organized games: and the present long summer vacation should be

replaced by a holiday of about one month's duration. The lines on which this system might be organized have been described earlier in the chapter.<sup>1</sup>

(26) *Hours of Labour*.—In order to render the above system possible, those of young persons under eighteen must be reduced. What is proposed is an immediate reduction to a maximum of forty-eight per week, to be followed by a further decrease to forty-five and eventually to forty-two.<sup>2</sup> Certain exceptions may have to be allowed. Employers who prefer to do so may work their boys in two shifts, each for half time, and for these further continuation school accommodation will have to be provided. To meet the convenience of employers alternative ways of meeting the reduced hours will have to be allowed.

(27) *Overtime and Nightwork*.—All irregular and spasmodic overtime by boys under eighteen should be prohibited. But a limited extension of boys' hours in certain periods of the year should be permitted, subject to the proviso that there is a reduction to at least an equal extent in other months. Nightwork in continuous processes should be further restricted on the lines laid down by the recent Committee on the subject.

#### IV. CONCLUSION.

Such are my main proposals for dealing with the Problems (for there is more than one problem) of Industrial Training. Some of them will involve far-reaching changes which can

<sup>1</sup> The Children (Employment and School Attendance) Bill gives Local Authorities power to require children, who have left the Elementary School and are under 16 years of age, to attend Continuation Schools for not more than 8 hours per week. It may also make bye-laws regulating the maximum number of daily and weekly hours for which children under 16 may be employed, and the age below which, and the hours between which, employment is illegal. One unfortunate provision was added in Committee, limiting the hours of work on the days which a child attends Continuation Schools to a maximum (including such attendance) of 8. This would be likely to cause a great deal of inconvenience, and in my view it is far better to fix a maximum week's work for all children and arrange the daily hours according to convenience.

<sup>2</sup> Exclusive of attendance at Continuation Schools.

only be brought about by legislation ; and among the most important of them are many which have been continually before the public for some years. These include the prohibition of half time and street trading, the raising of the School Leaving Age, compulsory Continuation Schools, and reduction of the hours of juvenile labour. Others, so far as I know, have not previously been put forward, as, for instance, the suggestions for special rules in Industrially Dangerous Trades and for Juvenile Trade Boards. Nor have proposals for a Minimum Wage for juveniles, for reduction in their hours of work and for restriction of overtime taken the exact form that they have been given in this chapter. Indeed, the problem, if it is to be effectively dealt with, requires bold and far-reaching measures ; but these alone will not be sufficient.

For the preceding summary consists to a considerable extent of proposals for utilizing existing institutions and of suggestions for small detailed administrative improvements, and these are no less necessary than more important changes. For progress often lies far more in the gradual building up of an organization than in sensational legislative change : and this is undoubtedly, perhaps unusually, true in the present case.

Lack of system and method have led to bad habits and slipshod ways and to the neglect of more important future interests for less important but more immediate ones. There is surprisingly little of deliberate exploitation, surprisingly much disorganization and confusion. Indeed so much are " muddle " and lack of organization at the root of the trouble that whilst the results are very serious indeed, no class in particular is to blame. For deliberate exploitation on the one hand and misconduct on the other play but a small part in producing them. And the remedy is Organization—slow, detailed, complicated if you will ; for by it good may be made to replace bad, right habits to grow up gradually, and the wrong ones that exist at present to disappear bit by bit.

And education, training and organization are necessary

if we are to make the best of our national faculties and opportunities and to make full use of the increasing national demand. For at the present moment there are signs, and more than signs, that failure to train properly in the past has led to a lack of capable workmen now that a real boom has come, and when it is over the permanent expansion in our industries is likely to be less than it otherwise might have been. Progress demands the elimination of the untrained and the ill-trained, so that instead of some being fit only for casual labour, all may be ready to take each the job suited to his capacity, and to play steadily their part in the work of the community.

But if this is necessary in order to make the best of the national industry and to satisfy to the full the national demand for labour, a steady and adequate growth in the latter is no less essential if permanent improvement is to be made in training and education. Failure in industry and demand to absorb fully the supply means inevitably that there is labour to waste and that it will be wasted—whether by the irregular employment of men or the irregular training of boys. On the other hand a brisk demand means economical methods both of employment and teaching.

But it is the former result that appears to have come about in recent years. There has been labour to waste and it has been wasted ; and now in a real boom it proves insufficient, if not in quantity, at least in quality. To ensure good methods, increase in the national demand and national output are essential, and by some means or other they must be obtained. Increased production cannot be secured without improved methods of training, and improved methods of training will not be permanent without a brisker and more adequate demand for labour. The two go hand in hand. This book has attempted to deal with one of them, the other lies outside its scope.



## APPENDIX I

### FORMS USED AND QUESTIONS ASKED IN APPROACHING EMPLOYERS, FOREMEN, TRADE UNION OFFICIALS AND OTHERS.

#### **A. Form of Questions adopted in dealing with Employers and showing the Chief Points on which Information was sought.<sup>1</sup>**

1. What is the policy of your firm as regards teaching boys the trade.
2. What classes of mechanics do you employ?
3. At what age does a boy usually start? Does he come direct from school.
4. What is the usual period of service? Is it sufficient?
5. Is there any recognized proportion of boys to journeymen?
6. Are any preliminary precautions taken to see that a boy is suited to his trade? If so what are they?
7. Do you give any preference to your employé's sons?
8. Do you use indentures and premiums? At what wages does a boy start? Does he get continuity of employment?
9. What part is played in teaching the boy by (a) the employer, (b) the foreman, (c) the men in the shop?
10. What work does a lad start at? How does he progress?
11. Do you insist on your boys attending Technical Schools?
12. What part do such schools play in teaching a trade?
13. Is your trade "picked up" by errand boys, improvers or labourers?
14. Is your trade recruited at all from outside London?

#### **B. Form of Questions used in dealing with Trade Union Officials and showing the Chief Points to which Enquiry was directed.**

1. What is the usual method of teaching boys in your trade? Are any other methods adopted?

<sup>1</sup> The questions in this and the following table were used chiefly to form a basis for oral discussion of the subject, rather than for the purpose of obtaining written answers.

2. Does your Trade Union lay down any rules respecting apprentices and learners?
3. What is the usual age at which boys start to learn a trade and the usual period of service?
4. What is (a) the normal, (b) the recognized, proportion of boys to men.
5. Are any measures taken by the Union to assist its members in placing their sons, or to see that the lads who are put to the trade are suited to it?
6. Are indentures and premiums usual? Is there any regulation of learners' wages? Do they get continuity of employment?
7. What is the actual method of teaching usually adopted, and the part played in it by (a) employers, (b) foremen, (c) the men.
8. Are the latter favourably disposed towards the lads?
9. What attitude is adopted by the Trade Union towards the Technical Schools? Does it encourage, e.g. by means of prizes, or compel, the lads to attend?
10. What is the actual value of a Technical School to the lads? In what relation does it stand to their work in the shop?
11. Should lads move about at the close of their time?
12. Is the trade picked up in any way, e.g. by learners, errand boys or labourers?
13. Has the development of machinery influenced the methods of teaching the trade?
14. Do many provincial workmen come into your trade in London? Are they better taught than the London men?

**C. List of the Chief Questions asked of the Students<sup>1</sup> of Trade and Technical Schools for the purpose of obtaining their Industrial Histories.**

1. Method by which the boy learnt or was learning his trade, e.g. by apprenticeship, etc.
2. Age on leaving school and at the time of the interview.
3. Father's trade.
4. Boy's reasons for choosing his employment.
5. Jobs, if any, at which he worked previous to the one on which he was engaged at the time of the interview, and details of them.
6. Wages received in his present and previous jobs.
7. Continuity or discontinuity of his employment.
8. Character of the shops in which he has worked. Numbers of journeymen and learners employed.

<sup>1</sup> These were in all cases interviewed personally.

9. The kind of work on which the boy has been engaged. How much has he learnt? Does he actually use the tools?

10. Who is responsible for teaching him? Is he actually taught? What is the employer's attitude in this respect?

11. Attendance at Trade Schools: for how many sessions? for how many hours per week? is he let off early from the workshop? how did he come to go to such a school? what attitude have his employers adopted towards his attendance at it?

## APPENDIX II.

### TABLES ILLUSTRATING IN DETAIL THE TRADE DISTRIBUTION OF THE POPULATION IN LONDON AND IN THE REST OF ENGLAND AND WALES.

A. Tables giving the number of workers employed in some of the larger industries of London. Dealers are, so far as possible, excluded.

(i.) *Industries in which the general level of skill is high and in which London has an excess, often a considerable excess, of workers.*

| Industry.                            | London. |                      | Rest of England and Wales. |                      | Number in London if the proportion were the same as in the Rest of England and Wales. | Actual Excess in London. |
|--------------------------------------|---------|----------------------|----------------------------|----------------------|---|--------------------------|
|                                      | Number. | Per 10,000 Occupied. | Number.                    | Per 10,000 Occupied. |   |                          |
| Precious Metals, etc.                | 33,670  | 156                  | 49,069                     | 53                   | 11,471  | 22,199                   |
| Building and Works of Construction . | 217,324 | 1,004                | 728,803                    | 785                  | 169,903   | 47,421                   |
| Woodwork and Furniture . . . .       | 70,121  | 324                  | 146,268                    | 157                  | 33,981  | 36,140                   |
| Skins and Leather .                  | 18,597  | 86                   | 47,294                     | 51                   | 11,038  | 7,559                    |
| Paper and Printing                   | 74,520  | 344                  | 100,979                    | 109                  | 23,592  | 50,928                   |
| Total . . . .                        | 414,232 | 1,914                | 1,072,413                  | 1,154                | 249,985 <sup>1</sup>  | 164,247                  |

<sup>1</sup> In this table and in tables (ii.) and (iii.) the totals in this column are those obtained by adding together the separate items in it and not by taking the total number per 10,000 at the rate given for the Rest of England and Wales.

(ii.) *Industries in which the general level of skill is moderate, and in which London has some excess of workers.*

| Industry.   | London. |                      | Rest of England and Wales. |                      | Number in London if the proportion were the same as in the Rest of England and Wales. | Actual Excess in London. |
|---|---------|----------------------|----------------------------|----------------------|---|--------------------------|
|   | Number. | Per 10,000 Occupied. | Number.                    | Per 10,000 Occupied. |   |                          |
| Dress . . . . .   | 89,625  | 414                  | 285,710                    | 308                  | 66,663  | 22,962                   |
| Chemicals, Drugs, Dyes, etc . . . .                                     | 21,126  | 98                   | 53,723                     | 58                   | 12,553  | 8,573                    |
| Production of Food Gas, Water, Electricity and Sanitary Service . . . . | 33,748  | 156                  | 111,201                    | 120                  | 25,972  | 7,776                    |
|   | 28,168  | 130                  | 74,071                     | 80                   | 17,315  | 10,853                   |
| Total . . . . .   | 172,607 | 798                  | 524,705                    | 565                  | 122,503   | 50,164                   |

(iii.) *Industries, other than those practically non-existent in London, in which it shows a considerable deficiency of workers.*

| Industry.   | London. |                      | Rest of England and Wales. |                      | Number in London if the proportion were the same as in the Rest of England and Wales. | Actual Deficiency in London. |
|---|---------|----------------------|----------------------------|----------------------|---|------------------------------|
|   | Number. | Per 10,000 Occupied. | Number.                    | Per 10,000 Occupied. |   |                              |
| Metals, Machines, Implements and Conveyances <sup>1</sup> . | 162,538 | 751                  | 1,112,391                  | 1,197                | 259,075   | 96,537                       |
| Bricks, Cement, Pottery and Glass .                         | 8,178   | 38                   | 119,603                    | 129                  | 27,920  | 19,742                       |
| Total . . . . .   | 170,716 | 789                  | 1,231,994                  | 1,326                | 286,995   | 116,279                      |

<sup>1</sup> Excluding the Conversion of Metals.

**B. Tables showing the numbers of male workers in certain individual trades in which London possesses a marked proportional or gross excess of workers.**

(i) *Skilled occupations showing a marked excess (i.e. more than twice as many in proportion employed in London as in the Rest of England and Wales).*

| Trade.  | London. |                      | Rest.   |                      | Relative Proportions between the numbers per 10,000 <sup>1</sup> (Rest = 100). |
|---|---------|----------------------|---------|----------------------|--|
|   | Number. | Per 10,000 Occupied. | Number. | Per 10,000 Occupied. |  |
| Electrical Apparatus Makers                         | 27,671  | 128                  | 57,075  | 61                   | 210  |
| Gold and Silversmiths and Jewellers . . . . .       | 6,597   | 30                   | 13,068  | 14                   | 214  |
| Scientific and Surgical Instrument Makers . . . . . | 6,985   | 32                   | 7,283   | 8                    | 400  |
| Musical Instrument Makers . . . . .                 | 8,449   | 39                   | 5,666   | 6                    | 650  |
| Painters, Decorators and Glaziers . . . . .         | 61,056  | 282                  | 123,507 | 133                  | 212  |
| Gasfitters . . . . .                                | 8,070   | 37                   | 9,046   | 10                   | 370  |
| Cabinet Makers . . . . .                            | 19,393  | 90                   | 30,617  | 33                   | 273  |
| French Polishers . . . . .                          | 8,164   | 38                   | 9,187   | 10                   | 380  |
| Upholsterers . . . . .                              | 5,786   | 27                   | 10,910  | 12                   | 225  |
| House and Shop Fitters . . . . .                    | 5,309   | 25                   | 8,265   | 9                    | 278  |
| Wood Carvers . . . . .                              | 5,408   | 25                   | 5,957   | 6                    | 417  |
| Wooden Box and Packing-case Makers . . . . .        | 4,788   | 22                   | 6,959   | 7                    | 314  |
| Printers and Lithographers . . . . .                | 57,471  | 266                  | 70,547  | 76                   | 350  |
| Bookbinders . . . . .                               | 7,248   | 33                   | 5,712   | 6                    | 550  |
| Furriers and Skinners . . . . .                     | 5,605   | 26                   | 2,921   | 3                    | 867  |
| Leather Goods Makers . . . . .                      | 5,252   | 24                   | 5,377   | 6                    | 400  |
| Brush and Broom Makers . . . . .                    | 3,454   | 16                   | 6,359   | 7                    | 229  |
| Motor Drivers . . . . .                             | 10,486  | 48                   | 9,457   | 10                   | 480  |
| Total . . . . .                                     | 257,192 | 1,188                | 387,913 | 418                  | 261  |

<sup>1</sup> The number per 10,000 employed in the trades concerned in the rest of England and Wales is in this and the following trades taken as 100, and the number per 10,000 employed in Greater London is shown as a percentage of this.

(ii.) *Occupations, predominantly low-skilled, showing a marked excess in London.*

| Occupation.   | London. |                      | Rest.   |                      | Relative Proportions between the numbers per 10,000 (Rest = 100). |
|---|---------|----------------------|---------|----------------------|---|
|   | Number. | Per 10,000 Occupied. | Number. | Per 10,000 Occupied. |   |
| Porters, Messengers, and Watchmen . . . . .                 | 73,850  | 341                  | 149,158 | 161                  | 212   |
| Warehousemen . . . . .                                      | 3,256   | 15                   | 6,538   | 7                    | 214   |
| Builders' Labourers . . . . .                               | 27,696  | 128                  | 38,330  | 41                   | 312   |
| Paperhangers and White-washers . . . . .                    | 4,249   | 20                   | 1,711   | 2                    | 1,000   |
| Stationery, Envelope and Paper Box and Bag Makers . . . . . | 5,922   | 27                   | 5,836   | 6                    | 450   |
| Cellarmen . . . . .   | 5,608   | 26                   | 9,346   | 10                   | 260   |
| Barmen . . . . .  | 13,177  | 61                   | 15,516  | 17                   | 359   |
| Total . . . . .   | 133,758 | 618                  | 226,435 | 244                  | 253   |

(iii.) *Occupations showing a smaller proportional, but a large gross, excess.*

| Occupation.                    | London. |                      | Rest.   |                      | Relative Proportions between the numbers per 10,000 (Rest = 100) |
|--------------------------------|---------|----------------------|---------|----------------------|--|
|                                | Number. | Per 10,000 Occupied. | Number. | Per 10,000 Occupied. |  |
| Cabmen and Stablemen . . . . . | 22,990  | 106                  | 52,371  | 56                   | 189  |
| Carmen and Van-boys . . . . .  | 84,158  | 389                  | 211,120 | 227                  | 171  |
| Dock Labour . . . . .          | 28,058  | 130                  | 74,581  | 80                   | 162  |
| Plumbers . . . . .             | 14,886  | 69                   | 50,082  | 54                   | 128  |
| Total . . . . .                | 150,092 | 693                  | 388 154 | 418                  | 166  |

C. Table showing occupations in which London has a noticeable deficiency of any kind.

| Occupation.  | London. |                      | Rest.   |                      | Relative Proportions between the numbers per 10,000 (Rest = 100) |
|--|---------|----------------------|---------|----------------------|--|
|  | Number. | Per 10,000 Occupied. | Number  | Per 10,000 Occupied. |  |
| Railway Engine Drivers and Stokers . . . . .         | 9,580   | 44                   | 60,103  | 65                   | 68   |
| Iron Founders . . . . .                              | 3,551   | 16                   | 98,640  | 106                  | 15   |
| Blacksmiths and Strikers . .                         | 13,006  | 60                   | 112,299 | 121                  | 50   |
| Erectors, Fitters, Turners (including Labourers) . . | 16,897  | 78                   | 151,541 | 163                  | 48   |
| Masons and Masons' Labourers                         | 5,125   | 24                   | 57,888  | 62                   | 39   |
| Navvies and Paviours . . .                           | 8,526   | 39                   | 59,125  | 64                   | 61   |
| Brick, Plaster and Cement Makers . . . . .           | 1,010   | 5                    | 58,099  | 63                   | 8  |
| Earthenware and Pottery Makers . . . . .             | 2,320   | 11                   | 38,104  | 41                   | 27   |
| Tanners . . . . .                                    | 999     | 5                    | 9,570   | 10                   | 50   |
| Total . . . . .                                      | 61,014  | 282                  | 645,369 | 696                  | 41   |

## APPENDIX III.

### TABLES ILLUSTRATING THE ATTENDANCE AT TRADE AND CONTINUATION SCHOOLS IN LONDON.

**A. The Number of Classes which qualified for Grants held in the Chief Groups of Subjects in the County Boroughs and certain Administrative Counties in England in the year ending July 31, 1912.<sup>1</sup>**

| Subject.  | Number<br>of Classes. | Percentage of<br>Total Number |
|---|-----------------------|-------------------------------|
| 1. English . . . . .                                | 9,033                 | 12·9                          |
| 2. Languages . . . . .                              | 3,261                 | 4·7                           |
| 3. Mathematics . . . . .                            | 10,936                | 15·6                          |
| (a) Mathematics (3,027).                            |                       |                               |
| (b) Practical Mathematics (7,909).                  |                       |                               |
| 4. Science . . . . .                                | 4,780                 | 6·8                           |
| 5. Mental Science and Psychology . . . . .          | 206                   | 0·3                           |
| 6. Sociology . . . . .                              | 1,769                 | 2·5                           |
| 7. Industrial Subjects . . . . .                    | 7,413                 | 10·6                          |
| (a) Engineering and Metal Trades (3,214).           |                       |                               |
| (b) Building and Woodworking Trades (1,680).        |                       |                               |
| (c) Chemical Trades (361).                          |                       |                               |
| (d) Mining and Metallurgy (857).                    |                       |                               |
| (e) Textile Trades (710).                           |                       |                               |
| (f) Clothing Trades (245).                          |                       |                               |
| (g) Book and Printing Trades (234).                 |                       |                               |
| (h) Home Industries (22).                           |                       |                               |
| (j) Miscellaneous Trades (90).                      |                       |                               |
| 8. Rural Subjects . . . . .                         | 474                   | 0·7                           |
| 9. Nautical Subjects . . . . .                      | 54                    | 0·1                           |
| 10. Commercial Subjects . . . . .                   | 13,220                | 18·9                          |
| 11. Domestic Subjects . . . . .                     | 10,328                | 14·8                          |
| 12. Ambulance, Midwifery and Home Nursing . . . . . | 1,510                 | 2·2                           |
| 13. Physical Training . . . . .                     | 1,827                 | 2·6                           |
| 14. Manual Instruction . . . . .                    | 1,749                 | 2·5                           |
| 15. Art . . . . .                                   | 2,188                 | 3·1                           |
| 16. Music . . . . .                                 | 1,143                 | 1·6                           |
| Total . . . . .                                     | 69,891                | 100·0                         |

It should be noted that the 9,644 classes in Domestic Subjects are confined to girls.

<sup>1</sup> Statistics of Public Education for England and Wales. Part I, Edu-

**B. Table showing the Number of Enrolments in Evening Classes and the Number and Percentage of Students who qualified for Grant, in London and elsewhere, in the year ending July 31, 1912.<sup>1</sup>**

|   | Boys and Men.         |                                  |                                      | Women and Girls.      |                                  |                                      |
|---|-----------------------|----------------------------------|--------------------------------------|-----------------------|----------------------------------|--------------------------------------|
|   | Number of Enrolments. | Number who qualified for grants. | Percentage who qualified for grants. | Number of Enrolments. | Number who qualified for grants. | Percentage who qualified for grants. |
| London . . . .  | 96,247                | 70,508                           | 73.2                                 | 80,965                | 56,744                           | 70.1                                 |
| Other Administrative Counties (not working under Rule 34) | 91,156                | 76,116                           | 83.5                                 | 62,165                | 52,731                           | 84.8                                 |
| County Boroughs   | 150,456               | 132,206                          | 87.9                                 | 97,598                | 82,926                           | 85.0                                 |
| Total . . . .   | 337,859               | 278,830                          | 82.5                                 | 240,728               | 192,401                          | 79.9                                 |

cational Statistics, 1911-12, Table 86, pp. 227-230 (Col. 6934 of 1913). The Evening Schools' Statistics for England are returned in two parts. Of these one gives the figures for the County Boroughs and for those Administrative Counties which do not work under the provisions of Article 34 of the Evening Schools Code, and the other those for the twenty-five Administrative Counties which are working under that Article. The statistics in this table are those given in the first part which includes London. It may be added that in the districts covered by it the number of students enrolled was 578,587 in 1911-12, of whom 471,231 qualified for grant, as compared with 144,189, of whom 135,349 qualified for grant, in Counties working under Article 34.

<sup>1</sup> Table 90 of Cd. 6934.

Table showing the Proportion of all Boys and Girls under twenty years of age in the County of London, who were enrolled as Evening Students and who qualified for Grants in the year ending July 31, 1909.

| Age.        | Boys.       |                | Girls.      |                |
|-------------|-------------|----------------|-------------|----------------|
|             | Enrolments. | Grants Earned. | Enrolments. | Grants Earned. |
|             | Per cent.   | Per cent.      | Per cent.   | Per cent.      |
| 12-14 . . . | 10·0        | 2·6            | 23·2        | 14·3           |
| 14-15 . . . | 48·5        | 26·4           | 59·4        | 36·7           |
| 15-20 . . . | 22·5        | 15·4           | 16·0        | 10·4           |
| 14-20 . . . | 25·5        | 16·7           | 19·4        | 12·5           |

D. Proportions of Students earning Grants to the Total Number enrolled at each year of age from 14 to 21, and above that age, during the year ending July 31, 1909.

| Age.              | Boys and Men. | Girls and Women. | Total. |
|-------------------|---------------|------------------|--------|
| 14-15 . . . . .   | 54·4          | 61·6             | 57·6   |
| 15-16 . . . . .   | 64·7          | 66·5             | 65·4   |
| 16-17 . . . . .   | 68·5          | 64·7             | 67·1   |
| 17-18 . . . . .   | 69·2          | 64·3             | 67·4   |
| 18-19 . . . . .   | 71·1          | 64·7             | 68·6   |
| 19-20 . . . . .   | 71·7          | 64·5             | 68·9   |
| 20-21 . . . . .   | 71·7          | 64·6             | 68·8   |
| Over 21 . . . . . | 73·1          | 69·2             | 71·1   |
| 14-20 . . . . .   | 65·4          | 64·3             | 64·9   |
| Average . . . . . | 68·2          | 66·4             | 67·4   |

**E.** Table showing the Number of Students engaged in certain Trades and attending Evening Schools of any kind in London in 1910-11, and the total Numbers of occupied Males in the County of London in those Trades between the ages of 14 and 20 at the Census of 1901, as given in a paper read by Sir Robert Blair, Education Officer of the London County Council in March, 1911.<sup>1</sup>

| Industry or Trade.  | Total at Evening Schools. | Estimated Numbers engaged in those occupations at the Census of 1901. |
|---|---------------------------|---|
| <i>Building Trades—</i>   |                           |   |
| Bricklayers . . . . .   | 228                       | 1,143   |
| Carpenters and Joiners . . . . .  | 1,492                     | 3,834   |
| Painters and Decorators . . . . .   | 464                       | 1,814   |
| Plasterers . . . . .  | 107                       | 622   |
| Plumbers . . . . .  | 834                       | 2,053   |
| Masons and Stone Carvers . . . . .  | 291                       | 507   |
| <i>Engineering and Metal Trades—</i>  |                           |   |
| Electrical Instrument Makers . . . . .  | 294                       | 2,526   |
| Brass Finishers . . . . .   | 244                       | 771   |
| Boiler Makers, Platers and Rivetters . . . . .  | 167                       | 579   |
| Fitters, Turners and Machinemen . . . . .   | 2,201                     | 1,517   |
| Metal Plate Workers . . . . .   | 341                       | 2,645   |
| Motor and Cycle Engineers . . . . .   | 412                       | 645   |
| Blacksmiths and Strikers . . . . .  | 346                       | 1,274   |
| <i>Wood and Furniture Trades—</i>   |                           |   |
| Cabinet Makers . . . . .  | 1,078                     | 2,505   |
| French Polishers . . . . .  | 210                       | 1,290   |
| Upholsterers . . . . .  | 295                       | 802   |
| Coach and Van Builders and Wheelwrights . . . . .                                       | 269                       | 875   |
| Wood Carvers and Gilders . . . . .  | 217                       | 919   |
| <i>Art Metal, etc.—</i>   |                           |   |
| Gold and Silver Smiths and Jewellers . . . . .  | 590                       | 1,128   |
| Optical and Scientific Instrument Makers (other than Sight-Testing Opticians) . . . . . | 412                       | 843   |
| Musical Instrument Makers . . . . .   | 114                       | 1,312   |
| Horological Trades . . . . .  | 135                       | 359   |
| <i>Printing and Bookbinding—</i>  |                           |   |
| Printing and Lithography (including paper and stationery trades) . . . . .              | 2,794                     | 9,362   |
| Bookbinding . . . . .   | 511                       | 1,033   |
| Photographic Trades . . . . .   | 526                       | 352   |
| <i>Leather Trades—</i>  |                           |   |
| Leather Manufacture . . . . .   | 108                       | 1,212   |
| Boot and Shoe Manufacture . . . . .   | 539                       | 2,263   |
| Saddlery and Harness Makers . . . . .   | 114                       | 489   |

<sup>1</sup> The figures for the total number occupied between 14 and 20 are those of Sir Robert Blair's paper, based on the Census of 1901. In a note

introductory to the statistics, he states that " the list of occupations was not based on the classification of the Census returns, but was drawn up after consultation with the principals of various polytechnics, technical institutes . . . and represents the best that can at present be done with the information given on the students' enrolment forms." Hence the figures given in the Census of 1911 would not, owing to differences of classification, be always strictly comparable with those of the number attending evening schools. It must be remembered that in many trades, there was between 1901 and 1911 a decline, and even a considerable decline, in the numbers of youths between 14 and 20. In all Evening Schools in London, the students between these ages were in the session of 1911-12 rather less than three-fifths of the total number in the case of men and boys, and less than one-half in that of women and girls.

Sir Robert Blair also stated that students would not in all cases be attending classes bearing directly on their occupations, but that the great majority would be.

## APPENDIX IV.

### TABLES ILLUSTRATING THE CHANGES IN THE PERCENTAGES OF UNEMPLOYMENT FROM 1870-1909,

#### A. Table giving the ten-yearly averages of Unemployment from 1870 to 1909 in certain Industries and Unions.<sup>1</sup>

| Industry or Union.  | 1870-9.          | 1880-9. | 1890-9. | 1900-9.              |
|---|------------------|---------|---------|----------------------|
| All Unions making Returns (uncorrected percentage)                      | 3.8              | 5.6     | 4.4     | 4.8 (a) <sup>2</sup> |
| Percentage of Sixteen Trade Unions making continuous returns since 1873 | 4.7 <sup>3</sup> | 5.7     | 4.6     | 5.3 (b)              |
| Engineering, Shipbuilding and Metal Trades                              | 5.0              | 7.0     | 6.0     | 6.8                  |
| Amalgamated Engineers   | 3.6              | 4.4     | 4.3     | 4.9                  |
| Iron Founders   | 7.6              | 8.1     | 6.3     | 9.1                  |
| Iron Moulders (Scotland)  | 8.9              | 17.3    | 12.3    | 14.8                 |
| Boiler Makers and Iron and Steel Shipbuilders                           | 6.5 <sup>3</sup> | 10.3    | 9.1     | 11.2                 |
| Building Trades (Amalgamated Carpenters and Joiners only)               | 2.3              | 5.4     | 2.4     | 6.8                  |
| Woodworking and Furniture Trades  | 3.5              | 3.2     | 2.9     | 5.3                  |
| United Coachmakers  | 4.4              | 4.0     | 2.7     | 4.7                  |
| Furnishing Trades Association   | 0.9              | 2.7     | 1.4     | 5.4                  |
| Amalgamated Woodcutting Machinists                                      | 1.5 <sup>3</sup> | 2.1     | 1.8     | 5.1                  |
| Printing and Bookbinding Trades   | 2.4              | 2.5     | 4.1     | 4.7                  |
| London Compositors  | 2.5              | 3.1     | 3.8     | 5.1                  |
| Typographical Association   | 2.0              | 1.9     | 4.2     | 4.9                  |
| London Bookbinders  | 3.2              | 2.5     | 4.6     | 5.8                  |

<sup>1</sup> The returns given are confined to the general percentage, the sixteen Trade Unions that have made continuous returns since 1873, and the four groups which make the bulk of the returns. The miscellaneous group of "other trades" is omitted. The way in which the returns have been made does not allow of a fair comparison over a long series of years, and no detailed figures are given for individual trades. In the returns for these trades there is not the same marked tendency for an increase in the percentages during the last decade (1900-9).

<sup>2</sup> In 1908 a change in the method of estimating the percentage was made. The new percentage (a) averaged about 0.4 per cent. a year less than the old one (b), for the years for which both were published. For purposes of comparison with earlier decades the latter is much fairer and this is available till the close of 1908, and is estimated for 1909 to complete the general percentage for the decade 1900-9.

<sup>3</sup> 1873-9 only.

**B. Table showing the Percentage of Unemployment in certain Industries and Unions during the chief periods of Good Trade between 1870 and 1909. (The averages given are for the two lowest consecutive years in each boom.)**

| Industry or Union.  | Early<br>Seven-<br>ties<br>(usually<br>1872-3) | Early<br>Eighties<br>(usually<br>1882-3) | About<br>1889-<br>1890. | About<br>1899-<br>1900. | About<br>1906-<br>1907. |
|---|--|--|-------------------------|-------------------------|-------------------------|
| All Unions making Returns<br>(uncorrected percentage) . . . . .                         | 1.0  | 2.4                                      | 2.1                     | 2.2 (a) <sup>1</sup>    | 3.6 (a) <sup>1</sup>    |
| Percentage of Sixteen Trade<br>Unions making Continuous<br>Returns since 1873 . . . . . | 1.4  | 2.4                                      | 2.0                     | 2.6 (b)                 | 4.1 (b)                 |
| Engineering, Shipbuilding and<br>Metal Trades . . . . .                                 | 1.1  | 2.5                                      | 2.2                     | 2.5                     | 4.5                     |
| Amalgamated Engineers . . . . .   | 0.7  | 2.0                                      | 1.8                     | 2.3                     | 2.9                     |
| Iron Founders . . . . .   | 1.9  | 4.7                                      | 2.3                     | 2.4                     | 5.2                     |
| Iron Moulders (Scotland) . . . . .  | 2.2  | 9.5                                      | 5.9                     | 6.1                     | 7.9                     |
| Boilermakers and Iron and<br>Steel Shipbuilders . . . . .                               | 1.1  | 1.2                                      | 2.7                     | 2.2                     | 8.1                     |
| Building Trades (Amalgamated<br>Carpenters and Joiners<br>only) . . . . .               | 0.6  | 3.5                                      | 2.0                     | 1.0                     | 7.1                     |
| Woodworking and Furniture<br>Trades . . . . .   | 1.9  | 2.5                                      | 2.3                     | 2.1                     | 4.7                     |
| United Coachmakers . . . . .  | 2.3  | 2.9                                      | 2.4                     | 2.2                     | 3.7                     |
| Furnishing Trades Associa-<br>tion . . . . .  | 0.1  | 1.7                                      | 0.8                     | 0.9                     | 4.8                     |
| Amalgamated Woodcutting<br>Machinists . . . . .   | 0.9  | 1.7                                      | 0.8                     | 1.7                     | 4.8                     |
| Printing and Bookbinding<br>Trades . . . . .  | 1.4  | 2.1                                      | 2.3                     | 3.8                     | 4.4                     |
| London Compositors . . . . .  | 1.3  | 2.8                                      | 2.4                     | 3.0                     | 4.5 <sup>2</sup>        |
| Typographical Association . . . . .   | 1.1  | 1.6                                      | 1.6                     | 4.5                     | 4.4                     |
| London Bookbinders . . . . .  | 1.7  | 1.3                                      | 1.2                     | 4.0                     | 5.5                     |

<sup>1</sup> See note 2 to Table A.

<sup>2</sup> The course of Unemployment with the London Compositors differed from that of other trades, being lowest in 1903-4.

C. Table showing the Percentage of Unemployment in certain Industries and Unions during the chief periods of Trade Depression between 1870 and 1909. (The averages given are for the two highest consecutive years in each Depression.)

| Industry or Union.  | Later<br>Seven-<br>ties<br>(usually<br>1878-9) | Mid<br>Eighties<br>(usually<br>1878-9) | Mid<br>Nineties<br>(usually<br>1893-4)<br>or<br>1894-5) | 1902-5<br>(usually<br>1904-5)   | 1908-9<br>(usually<br>1908-9)   |
|---|--|--|---|---------------------------------|---------------------------------|
| All Unions making Returns<br>(uncorrected percentage) .                     | 9.1  | 9.7                                    | 7.2   | 5.5 (a) <sup>1</sup><br>6.0 (b) | 7.7 (a) <sup>1</sup><br>8.1 (b) |
| The Sixteen Trade Unions<br>making Continuous Re-<br>turns since 1873 . . . | 9.3  | 10.1                                   | 8.0   | 6.9                             | 10.9 <sup>2</sup>               |
| Engineering, Shipbuilding and<br>Metal Trades . . . . .                     | 12.1   | 13.2                                   | 11.3  | 7.5                             | 12.7                            |
| Amalgamated Engineers . . . . .   | 8.7  | 7.1                                    | 8.4   | 5.4                             | 9.3                             |
| Iron Founders . . . . .   | 19.2   | 13.0                                   | 10.8  | 10.1                            | 17.7                            |
| Iron Moulders (Scotland) . . . . .  | 20.3   | 32.9                                   | 19.0  | 13.7                            | 29.8                            |
| Boilermakers and Iron and<br>Steel Shipbuilders . . . . .                   | 9.4  | 21.9                                   | 16.6  | 12.8                            | 22.1                            |
| Building Trades (Amalgamated<br>Carpenters and Joiners<br>only) . . . . .   | 7.1  | 7.6                                    | 4.1   | 7.6                             | 11.6                            |
| Woodworking and Furnishing<br>Trades . . . . .                              | 6.3  | 4.4                                    | 4.2   | 6.3                             | 7.9                             |
| United Coachmakers . . . . .  | 8.7  | 5.2                                    | 3.4   | 5.1                             | 7.6                             |
| Furnishing Trades Associa-<br>tion . . . . .                                | 3.1  | 4.3                                    | 2.4   | 6.7                             | 10.0                            |
| Amalgamated Woodcutting<br>Machinists . . . . .                             | 2.5  | 2.8                                    | 2.5   | 5.4                             | 8.4                             |
| Printing and Bookbinding<br>Trades . . . . .                                | 3.6  | 2.5                                    | 5.3   | 4.9                             | 5.5                             |
| London Compositors . . . . .  | 4.1  | 3.3                                    | 5.1   | 5.0                             | 6.1                             |
| Typographical Association . . . . .   | 3.3  | 1.8                                    | 5.8   | 5.0                             | 5.1                             |
| London Bookbinders . . . . .  | 4.9  | 3.9                                    | 5.9   | 6.4                             | 7.1                             |

<sup>1</sup> See note 2 to Table A.

<sup>2</sup> Estimated for 1909.

## APPENDIX V.

### THE TELEGRAPH MESSENGER AND THE VAN BOY.<sup>1</sup>

One of the most carelessly used terms of to-day is that of Blind Alley Employment. In its usual sense, it refers to jobs which give employment from the time a boy leaves school up to the age of from eighteen to twenty, and then compel him to seek other work. Thus they only last during boyhood, and do nothing to fit him for anything else. Now, employments of this kind, which do not absorb their boys at all or only a small proportion of them, are to be regarded as Blind Alleys *par excellence*; since unless special arrangements are made, they must normally end in this way.

But the term may also be used in a wider sense. In its essence Blind Alley employment does not consist solely in lack of permanence in a particular job, but in the failure to provide boys with a definite occupation. Thus a skilled trade may generally give permanent employment to those who enter it, but for various reasons some who do so, reach manhood without learning anything. They may, for instance, be badly trained and when they are men be unable to get work. Or, they may fail to stick to their job and wander from trade to trade, and learn none of them. In either case, they grow up without having any single definite thing which they can do. Hence the job that ends at about eighteen is the chief but not the sole source of this; but Blind Alley employment covers every failure to acquire a trade or occupation, using the latter in a wide sense to include all permanent work of any kind. All boys cannot become mechanics, every boy can and should acquire during boyhood some definite job, to which he can turn his hand afterwards.

Thirdly, there is not only Blind Alley work, but what may be called the Blind Alley character. Not only must a man have learnt some definite job, but even when unskilled, he needs to be steady, regular and disciplined. Hence two questions have to be asked. First, does a job provide permanent employment for its boys? And, secondly, does it fit them to become steady and regular workmen? And its character as a Blind Alley will

<sup>1</sup> Reprinted from the *Clare Market Review*, November, 1913.

depend on the answer to both. In this respect, some occupations are more dangerous than others. Thus the first Report of the Standing Committee on Boy Labour in the Post Office said: "While the more or less intermittent nature of a messenger's work, and its lack of any directly educational influence, no doubt tend to reduce, they do not destroy the value of the strict discipline and physical training under which the lads pass their service." On the other hand, the van boy has little discipline and control, he has to undergo little steady exertion, and at the same time his hours are often unduly long and quite preclude attendance at evening schools. The object of this article is to consider these two occupations as Blind Alleys from each of these aspects, and to discuss the desirability of the measures proposed or adopted for removing or mitigating their Blind Alley character.

There are several alternative methods of dealing with such employments. First, in extreme cases there is absolute prohibition, on the ground that, as in the case of Juvenile Street Trading, moral and industrial results are so serious that this alone can effectively prevent them. Secondly, it may be possible to remove, partly or wholly, the Blind Alley character of a job, either by reducing the number of boys employed in it, or by increasing the openings for permanent employment. Where feasible, this is perhaps the best alternative, but in the majority of cases such complete re-organization is not practicable. A third line of policy includes regulation of hours and conditions of labour to fit the boys better for other employment later on, and proper arrangements by means of Labour Exchanges to draft them at the right time into positions suited to their capacity.

The new organization in the Post Office that is now nearly complete forms an admirable instance of the successful adoption of the second alternative. Until a few years ago, the Post Office Messenger formed a stock example of Blind Alley employment. Every year it was necessary to dismiss some thousands of boys solely for lack of prospects, and many of them found their chances of good permanent employment destroyed, or seriously injured, in spite of advantages in the occupation as regards discipline and control. Further, owing to the standard of attainment required by the Post Office, the boys thus turned adrift were those who had reached the seventh standard at the Elementary Schools. At length a popular outcry against these conditions resulted in the appointment in 1910 of a strong Standing Committee on Boy Labour in the Post Office.

On beginning its work it found an establishment of boys amounting to nearly 16,000, including, however, a certain number of them between sixteen and nineteen, who had qualified for per-

manent employment. The total numbers dismissed at or before sixteen were 6,185 in 1908-9, and 6,267 in 1909-10, or counting only those dismissed for lack of prospects, 4,322 and 4,471. The first step was to consider and adopt various means of economizing boy labour. In certain indoor work, girl probationers were substituted for boys, 485 of the former with shorter hours eventually replacing 334 of the latter. Other expedients were the increased use of cycles, the employment of Assistant Postmen in the delivery of telegrams, telephonic delivery, and the use of pneumatic tubes and other labour-saving devices. Thus from 15,790 in March, 1910, the establishment had been reduced to 14,506 in September 1911, with the prospect of further reduction to 14,000. Eventually the Third Report of the Committee, dated July 23, 1913, expressed the hope that the final figure would be 13,000 or at most 13,500. This latter means on the old basis a reduction in dismissals for lack of prospects of over 1,100 annually.

Secondly, the Committee examined the means of increasing the numbers of boys who could be absorbed either in the Post Office itself or in other branches of the Government service. The latter were found to be unlikely to provide for many; but a considerable increase is expected in those kept on by the Post Office. They estimate that eventually the total number will be some 2,275 annually, some 1,650 of these being promoted on reaching the age of nineteen, and the rest earlier. Previous to 1911 the number absorbed never reached 1,700. This will mean a further reduction in dismissals of 600 per annum.

Thirdly, the number of boys required to keep up a given establishment obviously varies with the period of service. Under the old system, when the majority were dismissed at sixteen, over 6,000 fresh boys were taken on yearly. Now, an increase of the time worked by each of them leads to a corresponding reduction in these numbers, since two working five years each are equivalent to five working only two. Moreover, many boys use the Post Office temporarily and leave it when they find better work, and this leakage increases with every addition to the period of service. The Committee propose, therefore, to extend this till nineteen, thus making it last for five years instead of two, and as a result they expect to absorb permanently every boy of sufficient character and attainments who wishes to remain in the Postal Service. Interim measures are also proposed to meet the difficulties of transition, and already the numbers dismissed from lack of prospects at sixteen have been reduced from 4,322 in 1908 to 1,227 in 1911, and 433 in 1912. Finally, when the scheme has got into full working order, the Committee expect that some 1,600 boys will require to be provided for each year on reaching the age of nineteen and that about 1,650 places will be available.

Finally, measures have been taken to organize continued education. Special classes for messengers are arranged where possible, and up to sixteen four hours attendance a week has been made compulsory for all of them. The work has always had on the whole a favourable effect on the character of those employed in it, and previous defects have been removed by better organization. Hence the Committee can justly claim that under their scheme employment in the Post Office now offers unusually good prospects, and that the problem with which they had to deal is very near complete solution. In short the result of their policy has been to turn the boy-messenger's job from a Blind Alley into an occupation that will last him through life.

Such a complete solution of the difficulty is, unhappily, not often possible, and for many reasons it is particularly inapplicable to the case of vanboy labour. The openings for the Post Office messenger are both better and more numerous than the carmen's jobs which are as a rule the best the vanguards can hope for. Hence neither can they be tied down for four or five years with nothing better to offer them at the close, nor, even if they could be induced to stay so long, would there be sufficient places to absorb them. Again the Post Office is a single undertaking organized on an enormous scale. Carrying work is divided up among a large number of businesses of varying size; and therefore expedients for reducing numbers or increasing openings are far less easy of adoption. Hence the choice rests between the first alternative—prohibition—and the third—regulation.

On the surface there is a strong case for the former. The job is a marked Blind Alley in the first sense. For, while the Railway Companies and some of the larger carriers manage to absorb all the boys, who wish to stay, in other branches of their business, elsewhere a large proportion have to be got rid of. But further the employment produces to a marked extent the Blind Alley character. Lack of discipline and sustained exertion leads to the growth of casual and irregular habits; and many boys stay in it long enough to acquire bad habits and otherwise injure their prospects, but not long enough to rise to be carmen. Again the hours of labour are often such as to prevent attendance at Evening Schools or self-improvement in other directions. Indeed some think the conditions under which the work is done render this last inevitable, but the Committee on Vanboy Labour hold that it can be overcome by organization, similar to that already adopted by the Railways. Other disadvantages can similarly be removed and the employment has some merits. The work, being in the open air, is healthy. In itself it is not arduous; and it is well suited for boys who are never likely to rise beyond low-skilled labour.

But if reorganization is to be successful, it must provide for three things : first, for reducing the excess of boys to the minimum that the actual conditions will allow ; secondly, for establishing such improvements in hours and general conditions as shall give those employed reasonable opportunities both for education and for recreation ; and thirdly, for ensuring, by control and supervision, that the boys shall make the best both of themselves and of their opportunities.

As regards the first, steps are already taken by the Railway Companies and some other large employers to provide for all who wish to stay with them, and the substitution of motor lorries for horse vans is to some extent replacing boys by older youths or men. Apart from this not very much can at present be done, but as the Labour Exchange organization is improved, it should be possible to induce a larger and larger number of firms so to arrange their work as to provide permanently for a bigger proportion of their vanguards, and, as prospects are thus improved, to decrease the number required by increasing the time that each of them spends at the work.

As regards the second matter, certain difficulties arise owing to variations in the size of loads, and to the influence of the weather. These, in the view of the Committee, make the fixing of a maximum day's work impossible, but do not preclude a limitation of the number of hours to be worked per week. In both respects they are probably right : and their well-thought-out suggestions are admirably adapted to the needs of the employment. Boys under eighteen are limited to a maximum week of seventy hours, including meal times—one and a half per day, and are to receive the usual public holidays or days in lieu thereof. No boy under sixteen is to be employed between 9.30 p.m. and 6 a.m. Daily records are to be kept by employers of the hours worked by each boy and the times allowed for meals ; and local authorities are to be given the right of further regulation by bye-law. Even if, therefore, they do not go as far as some would like, these proposals should get rid of the worst cases of excessive hours and fix them at or near the limit adopted by the best firms—in this case the Railway Companies. Perhaps, however, the best hope of further reduction lies in the extension of their policy of refusing to collect after a certain hour. The evidence shows that employers would look with favour on such a regulation, and that difficulties are more likely to arise from their customers. Otherwise, further progress will probably have to come as part of a general policy dealing with boy labour as a whole.

Finally measures require to be taken to see that the boys make the best of these improved conditions, and these must take the

form of a proper system of care and control. First, such jobs should be filled by the right type of boy, that is, except where better prospects are given, either by those who in the ordinary course of events can hope for nothing better than low-skilled labour, or by those who are waiting for a better job. Secondly, provision should be made to draft them, when the time comes, into other places, for which their work at Evening Continuation Schools should so far as possible prepare them. Thirdly they must so far as may be be kept steadily at work. The occupation is liable in any case to produce casual and irregular habits and these are rendered worse by the failure of the boys to stick to it. They require to grow up regular, steady and disciplined workmen, and since the job is not favourable to this, care and control are the more essential. It may further be suggested, moreover, that the engagement of vanguards should only be carried out through a Labour Exchange, and that such engagements should be for fixed periods of not less than a year. This would increase the control over them, and check effectively the restless habits of so many, thus reducing the excessive numbers which enter the job. These proposals may appear drastic: but just as trades dangerous to health are subject to special rules under the Factory Acts, so those that are dangerous otherwise might be similarly treated. And such a comprehensive body of regulations as this would convert this employment into a form of unskilled work well suited to the less capable boys.

To sum up, therefore, these two occupations illustrate, each in its own way, the main methods of dealing with the Blind Alley. Conversion into a job with prospects is the more advantageous, but by far the less practicable; and the Post Office provides one of the rare cases where it can be carried out. In normal circumstances, however, careful regulation is the only available policy, and it can be made successful. Complete prohibition is a counsel of despair. The measures suggested above would, if successful, meet the difficulties and dangers that beset the vanguard, and of ordinary boy employments this is perhaps the most dangerous. If, therefore, regulation should in practice prove successful, there is hardly a Blind Alley job that would not yield, and yield more easily, to the same process.

## APPENDIX VI.

### NATIONAL INSURANCE AND BOY LABOUR<sup>1</sup>

Upon this subject the Insurance Act raises two important questions—that of the proper age for Insurance to commence, and that of the danger of encouraging the substitution of juvenile for adult workers. In the original Bill contribution to Health Insurance began at 14, but up to 16 only medical and sanatorium benefits were paid, and a lower rate up till 21, except where the insured person had others dependent on him. In Unemployment Insurance contribution began at 18, and benefits six months later. Since then, however, the starting age has been fixed uniformly at 16, or rather within one year of attaining that age.

The Health Insurance proposals were originally attacked on the ground of the injustice of exacting contributions and not paying benefit, and on July 10, Mr. Godfrey Locker-Lampson moved an amendment providing that "in respect of employed persons under 16, the employer's contribution only shall be paid." Against this it was urged that benefits between 14 and 16 were of less value than the additional ones that would accrue when the Reserved Values deficit had been paid off. The amendment was rejected, but afterwards the even wider change described was carried out.

A bigger question is involved, however, of the effect of the contribution on choice of employment. The flat rate, exacted alike from the apprentice's 4s., the learner's 5s., and the errand-boy's 8s., pressed with greater severity on the lower wages. The number who at present deliberately sacrifice the present to the future is probably small. More often the poverty of the family compels this, especially with the elder children: or again lack of information will lead to taking the first decent job that offers. The one thing that many working-class parents do really realize is the wage offered, they do not and often cannot know the potentialities of different jobs. So the rate of wages settles the matter, not because other things are sacrificed but because they are not understood. Others again insist on getting a certain rough minimum rate, usually 5s. or 6s., and are prepared to sacrifice the extra shilling or two above

<sup>1</sup> Reprinted from the *Clare Market Review*, February, 1912.

this for a chance to learn a trade. In this respect it is their minimum of subsistence, from which the employed contribution means a considerable deduction. It reduces the value of the wage, therefore, and in some cases will turn the scale in favour of the better paid job of worse prospects, where the margin available for paying the contribution will be greater.

Now take the employer's contribution. Whether or not there is a shortage of labour for unskilled boys' jobs, the numbers offering for the better posts are usually far in excess of requirements. Many employers do not find learners profitable and therefore are offering pretty nearly their full value already, and owing to the present unorganized conditions of boy labour will often be in a position to offer less, whatever Juvenile Advisory Committees may do in the future. Hence not only will the employed contribution reduce the value of the wage, but the money wage itself will in some cases be lowered.

Hence the fixing of entry into insurance at 16 both for employers and employed was a thoroughly wise move. In many if not most cases, a trade is definitely selected before 16, and at 14 parents are not likely to take into account such a payment two years later; and the number who because of it will throw up good work will be small. Wages too are appreciably higher at 16, and the disparity between those of learners and boy labourers is often less and probably other children are beginning to earn. Taken all round, therefore, the arguments for the postponement of insurance were overwhelming.

The second problem is centred round the fear that the Act may encourage the substitution of younger for older labour, either at 21 when the sliding scale on low wages comes into force, or when contributions begin at 16. The danger that this would be done at 18 in the case of Unemployment Insurance was a very real one, and the reduction of the age to 16 was as wise as the raising of it in Health Insurance. But as the Act has passed, the practical danger is not great.

The demand for boy labour is roughly in inverse proportion to its age, being greatest at 14, and declining till at 18 or 19 there comes a break in the working life of many when fresh employment has to be sought. Eighteen, therefore, is a critical age, so for the reasons already given is 14, and 16 is perhaps the least dangerous.

Hence the likelihood of displacement at 16 by younger boys is not great, and those who will then be displaced are not the learners, since an employer would defeat his own object if he put them off. It would be those who would in any case have to be dismissed at 18, and of the two, 16 is the better age for it since there is a far greater chance for them still to find a decent

opening. At 18 it is often too late. To get boys out of Blind Alley jobs comparatively early therefore is really an advantage. What is needed is efficient Exchange organization to put them into the right work afterwards.

Now turn to 21. So far the employer has paid a uniform 3*d.* which will then be increased for wages below 2*s.* 6*d.* a day. Will this cause a tendency to substitute juvenile labour? In the towns the problem is rather one of low earnings. Wage rates are comparatively high, but irregular employment reduces the amount earned; and the Bill only deals with rates of wage. So far, then, the danger of substitution is not great. Secondly employment is usually fixed by the time this age is reached. The transition from boy's work to man's comes earlier, namely at 18, and by 21 they have settled down to the new occupation. In Agriculture especially, when wages are low, it would mean the substitution for a trained man of an inexperienced youth. Moreover substitution of boys for men is mainly in jobs that demand only a boy's strength.

The danger, therefore, is at a minimum at 21. To bring the sliding scale into operation earlier, therefore, is to increase the danger which reaches a maximum at 18. For it is then that youths are most likely to be replaced by younger boys, and at this age the operation of the sliding scale will have its worse effect. For it is the age too at which it is most dangerous to turn anyone adrift.

Not only, therefore, can no change for the better be made in this way, but the age of 21 seems obviously the right one for this purpose. Both the problems raised by the Act are dealt with most wisely. For entry into insurance is so fixed as to avoid both the two critical ages of 14 and 18, and is put at 16. Therefore whatever its defects in its original form, it has now found out the policy that is likely to prove far and away the best in practice, extending and amplifying the one first advocated so ably in the Lampson amendment of July 10.

## APPENDIX VII.

**BY-LAWS IN FORCE IN LONDON DEALING WITH THE EMPLOYMENT OF CHILDREN AND WITH STREET TRADING BY YOUNG PERSONS, ADOPTED BY THE LONDON COUNTY COUNCIL BEFORE AND DURING 1911.**

*(Reprinted by kind permission of the London County Council.)*

**BY-LAWS** made by the London County Council, pursuant to the provisions of Sections 1 and 2 of the Employment of Children Act, 1903, regulating (a) the employment of children generally and (b) street trading by persons under the age of sixteen years within the County of London (exclusive of the City of London).

Note—By Section 13 of the Act the expression “child” means a person under the age of fourteen years.

### AS TO THE EMPLOYMENT OF CHILDREN GENERALLY.

1. A child under the age of 11 years shall not be employed.
2. A child liable to attend school full time shall not be employed on days when the school is open in industrial work at home except between the hours of 5 p.m. and 8 p.m., or on other days, except between 9 a.m. and 12 noon and between 5 p.m. and 8 p.m., or on Sundays.

Industrial work shall mean any work in which manual labour is exercised by way of trade or for purposes of gain in making, altering, repairing, ornamenting, finishing, adapting for sale or cleaning any article.

3. No boy or girl under the age of 14 years and liable to attend school full time shall be employed—

#### *A.—On days when the school is open—*

- (1) For more than 3½ hours in any one day.
- (2) Between 8 in the morning and 5 in the evening.
- (3) Before 6.30 in the morning.
- (4) After 8.30 in the evening.

*B.—On days when the school is not open—*

- (1) For more than 8 hours in any one day.
- (2) Before 6.30 in the morning.
- (3) After 9 in the evening.

4. A child liable to attend school full time shall not in any week in which the school is open on more than two days be employed for more than 20 hours.

5. A child liable to attend school full time shall not in any week during which the school is open on two days only or less be employed for more than 30 hours.

6. A child shall not be employed on Sundays except between the hours of 7 a.m. and 1 p.m. for a period not exceeding three hours.

7. A child shall not be employed in or in connection with the sale or delivery of intoxicating liquors except on premises where such liquors are exclusively sold in sealed vessels.

8. A child shall not be employed in any process carried on in a laundry to which the Factory and Workshop Act, 1901, does not apply.

9. No boy or girl under the age of 14 years shall be employed to lather customers or in similar work in any barber's or hair-dresser's shop.

**AS TO STREET TRADING OF PERSONS UNDER THE AGE OF 16 YEARS.**

10. No girl under the age of 16 years shall be employed in or carry on street trading.

11. No boy under the age of 14 years shall be employed in or carry on street trading.

12. No boy under the age of 16 years shall be employed in or carry on street trading before 6 in the morning or after 9 in the evening.

13. No boy under the age of 16 years shall at any time be employed in or carry on street trading unless—

- (1) He is exempt from school attendance and
- (2) He first procures a badge from the London County Council, which he shall wear whilst engaged in street trading on the upper part of the right arm in such a manner as to be conspicuous.

The badge shall be deemed to be a licence to trade, and may be withheld or withdrawn for such period as the London County Council think fit in any of the following cases—

- (a) If the boy has, after the issue of the badge to him, been convicted of any offence.

(b) If it is proved to the satisfaction of the London County Council that the boy has used his badge for the purpose of begging or receiving alms, or for any immoral purpose, or for the purpose of imposition, or for any other improper purpose.

(c) If the boy fails to notify the London County Council within one week of any change in his place of residence.

(d) If the boy commits a breach of any of the conditions under which such badge is issued ; such conditions to be stated on such badge or delivered to the boy in writing.

14. A boy to whom a badge has been issued by the London County Council shall in no way alter, lend, sell, pawn, transfer, or otherwise dispose of, or wilfully deface, or injure such badge, which shall remain the property of the London County Council, and he shall, on receiving notice in writing from the London County Council (which may be served by post) that the badge has been withdrawn, deliver up the same forthwith to the London County Council.

15. A boy under the age of 16 years, whilst engaged in street trading, shall not enter any premises used for public entertainment or licensed for the sale of intoxicating liquor for consumption on the premises for the purpose of trading.

16. A boy under the age of 16 years, whilst engaged in street trading, shall not annoy any person by importuning.

17. Nothing in these by-laws contained shall restrict the employment of children in the occupations specified in section 3 (a) of the Prevention of Cruelty to Children Act, 1904, further than such employment is already restricted by statute.

Numbers 1, 2, 4 and 5 to 8 (formerly numbered 6 to 9) inclusive of the foregoing by-laws were made by the London County Council on the 31st day of July, 1906, and were confirmed by One of His Majesty's Principal Secretaries of State on 4th October, 1906. Numbers 3 and 9 to 17 inclusive of the foregoing by-laws were made by the London County Council on 21st day of March, 1911, and were confirmed by One of His Majesty's Principal Secretaries of State on 3rd June, 1911.

## APPENDIX VIII.

### THE MOST IMPORTANT CLAUSES OF THE CHILDREN (EMPLOYMENT AND SCHOOL ATTENDANCE) BILL, NOW BEFORE THE HOUSE OF COMMONS.<sup>1</sup>

*(Reprinted by kind permission of H.M. Stationery Office.)*

1.—(1) A local education authority may make by-laws under section seventy-four of the Elementary Education Act, 1870, as amended by any subsequent Act—

- (a) Requiring parents to cause their children up to the age of fifteen years to attend school, as if in that section as amended fifteen years were substituted for fourteen years :
- (b) Providing for the total exemption from attendance at school of any child—
  - (i) who has attained the age of thirteen years or such later age as may be specified in the by-laws ; and
  - (ii) who is about to enter some occupation or employment which will, in the opinion of the authority, arrived at after consultation with the parent, be beneficial to him ; and
  - (iii) with respect to whom the authority is satisfied in such manner as may be specified in the by-laws that in view of his educational attainments and capacity he may properly be exempted.

(2) Where exemption from attendance at school is granted to any child under this section, the local education authority shall give to the child a certificate of exemption in such form as the authority determine.

(3) Where a local education authority has given to a child a certificate of exemption under this section, and has subsequently become aware that the child has either not entered or has left the employment in respect of which the certificate was

<sup>1</sup> Bill 190 of the present session.

given, the authority shall have power to revoke such certificate.

(4) The local education authority may make it a condition of the grant of a certificate of exemption that the child exempted shall attend continuation classes.

(5) Any by-law in force at the commencement of this Act which fixes a less age than fourteen as the age until which parents are required to cause their children to attend school, shall have effect as though fourteen were substituted for the age so fixed, and any enactment or by-law then in force so far as it provides for the exemption of children from school attendance shall cease to have effect, without prejudice to any exemption already granted :

Provided that this subsection, so far as it affects the law relating to the employment of children in factories and workshops under the Factory and Workshop Act, 1901, or to the education of children so employed, shall not come into operation until the first day of January nineteen hundred and seventeen.

2. In any proceedings for the breach of any by-law made under section seventy-four of the Elementary Education Act, 1870, as amended by any subsequent enactment, the court may, instead of inflicting a penalty, make an attendance order which shall have the same effect as an attendance order made under section eleven of the Elementary Education Act, 1876.

3. The Factory and Workshop Act, 1901, shall be construed and have effect as though—

(a) the following provision were added to section sixty-two thereof—

In England and Wales a child shall not be employed in a factory or workshop unless lawfully so employed on or before the first day of January nineteen hundred and seventeen ; and

(b) the following proviso were added to the definition of " child " in section one hundred and fifty-six thereof—

Provided that in England and Wales the expression " child " means any person who is under the age of fourteen years and any person over the age of fourteen whose parent is under an obligation to cause him to attend school, but does not include a child to whom a certificate of exemption from school attendance has been granted under the Children (Employment and School Attendance) Act, 1914.

4. A local education authority may make by-laws—

(1) prescribing for all children under the age of sixteen years, or for boys and girls separately, and with respect to all occupations or to any specified occupation—

- (a) the age below which employment is illegal ;  
and
  - (b) the hours between which employment is illegal ;  
and
  - (c) the number of daily and weekly hours beyond  
which employment is illegal :
- (2) prohibiting absolutely or permitting subject to conditions the employment of children under the age of sixteen years in any specified occupation.

The authority confirming the by-laws may require the local education authorities of contiguous areas to confer together for the purpose of making by-laws with respect to the matters provided for in this section when it appears to the authority that it is desirable that the by-laws should be uniform in the areas.

5.—(1) A boy under the age of seventeen or a girl under the age of eighteen shall not be employed in or carry on street trading :

Provided that—

- (a) a boy over the age of fifteen, or a boy under the age of fifteen who, before the passing of this Act, was lawfully engaged in street trading, may be employed in or carry on street trading if he holds a licence granted in accordance with the provisions of this Act ; and
  - (b) the provisions of this section shall not apply in the areas of rural district councils nor in the area of any borough council or urban district council which is not a local education authority if there are in force in the area by-laws relating to the employment of children.
- (2) If any person carries on trade in contravention of this section he shall be liable on summary conviction to a fine not exceeding twenty shillings, and in the case of a second or subsequent offence to a fine not exceeding five pounds.
- (3) The expression " street trading " includes the hawking of newspapers, matches, flowers and other articles, playing, singing, or performing for profit, shoe-blackening, carrying of luggage (except in the course of regular employment), and any other like occupation carried on in streets or public places, but does not include the sale in a market or fair of agricultural or horticultural produce.
- (4) This section shall not apply in respect of any person over the age of fourteen who is employed to assist his parent or guardian in street trading in any area in which by-laws under the preceding section are in force expressly permitting such employment.

6.—(1) A local education authority may grant to any boy over the age of fifteen and under the age of seventeen, or to any boy under the age of fifteen who before the passing of this Act was lawfully engaged in street trading, a licence to engage in street trading within the whole or any part of the area of the authority, and may prescribe the conditions on which such licences shall be granted, and may permit such conditions to be varied in accordance with the circumstances of each licensee.

(2) A local education authority may make arrangements with any committee constituted for the purposes of the Education (Choice of Employment) Act, 1910, or, subject to the approval of the Board of Trade, with any committee appointed by the Board of Trade to give advice and assistance to juvenile applicants at labour exchanges, whereby the committee shall undertake all or any of the duties of an authority under the preceding subsection.

(3) No licence for street trading shall be granted to a boy for whom the local education authority is able to secure more beneficial employment.

(4) No licence shall be refused on the grounds of poverty or general bad character of the applicant.

7. In considering whether any occupation or employment is beneficial to a child the local education authority shall have regard to its prospect of affording the child a useful training for permanent employment and to its compatibility with any continued education which in the opinion of the authority is available and suitable to the child.

8. A child under the age of fourteen years shall not be employed between the hours of nine in the evening and six in the morning, or, on days when he is required to attend at school, if he is not employed in accordance with the provisions of the Factory and Workshop Act, 1901, between the hours of eight in the evening and seven in the morning :

Provided that a local education authority may by by-law vary these hours either generally or for any specified occupation.

9. The conditions of employment imposed by by-laws made under this Act, and the conditions under which licences under this Act are granted, may, in the case of children no longer under an obligation to attend an elementary school, include a condition requiring attendance at continuation classes.

10.—(1) Where a child is required under this Act to attend continuation classes, the child shall attend up to such age, not exceeding sixteen years, and during such hours not exceeding eight in any week, as the local education authority may direct.

(2) A local education authority may on cause shown remit or modify any direction under this section with regard to attendance at continuation classes.

(3) A child who is required to attend continuation classes (other than classes for physical training) shall not be employed in any day upon which his attendance is so required for a number of hours which, when added to any time spent by him during the day in attendance at continuation classes in pursuance of that requirement, exceeds eight.

(4) If a child fails without reasonable excuse to comply with any requirement imposed upon him under this Act for attendance at continuation classes he shall be liable on summary conviction to a fine not exceeding five shillings, and the fact that any such failure is due to the child having been required to attend at his place of employment in a manner inconsistent with his due attendance at continuation classes shall, without prejudice to the generality of this subsection, be deemed to be a reasonable excuse.

(5) If any parent of a child by wilful default or by habitually neglecting to exercise due care has conduced to the commission of an offence under the immediately preceding subsection or otherwise to failure on the part of a child to attend continuation classes as required under this Act, he shall be liable, on summary conviction, to a fine not exceeding one pound, and, in the case of a second or subsequent offence, whether relating to the same or to another child, to a fine not exceeding five pounds.

(6) If any person employs a child in contravention of this section he shall be liable on summary conviction to a fine not exceeding two pounds, or in the case of a second or subsequent offence, not exceeding five pounds.

(7) The local education authority shall consult with local employers as to the arrangement of periods of attendance at continuation classes, and shall give to the employer of any child who is required to attend continuation classes under this Act particulars as to the amount and the time of attendance at continuation classes required in the case of that child.



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